AN EVALUATION OF RECREATIONAL NEEDS WITHIN THE WELLS PROJECT
(Recreational Needs Analysis)

WELLS HYDROELECTRIC PROJECT

FERC NO. 2149

FINAL REPORT
REQUIRED BY FERC

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ABSTRACT

The current Wells Hydroelectric Project (Wells Project) license will expire on May 31, 2012. The Public Utility District No. 1 of Douglas County (Douglas PUD) owns and operates the Wells Project and is using the Integrated Licensing Process (ILP) promulgated by the Federal Energy Regulatory Commission (FERC). The Recreation Resource Work Group (Recreation RWG), which is composed of interested parties (cities and counties around the reservoir, resource agencies, and tribes) and Douglas PUD staff, was formed for the purpose of identifying issues and information gaps that may require study during the relicensing of the Wells Project. The Recreation RWG, through a series of technical meetings, proposed an analysis of future recreation needs associated with operation of the Wells Project. The goal of this study was to research, describe, and quantify recreation use information and identify current and future recreation needs at the Wells Project to be addressed over the term of the next license. Through the needs analysis, potential measures were identified to address current and likely future recreation resource demands.

Generally, visitors were satisfied with facilities and the provision of recreational opportunities in the Wells Project. Maintenance of facilities was identified as good overall, with a future need to upgrade restroom and access sites to meet Americans with Disabilities Act (ADA) standards. Future recreational measures may include assisting in the development of a water trail, which has a set of guidelines for effective access and recreational activity enhancement. Additional measures may include safety and informational signage in Spanish, ADA related improvements, near-shore tent camping (water trail enhancement) and providing education about the Wells Project (including natural and social resources).

1.0 INTRODUCTION

1.1 General Description of the Wells Hydroelectric Project

The Wells Hydroelectric Project (Wells Project) is located at river mile (RM) 515.6 on the Columbia River in the State of Washington. Wells Dam is located approximately 30 river miles downstream from the Chief Joseph Hydroelectric Project, owned and operated by the United States Army Corps of Engineers (COE); and 42 miles upstream from the Rocky Reach Hydroelectric Project owned and operated by Public Utility District No. 1 of Chelan County (Chelan PUD). The nearest town is Pateros, Washington, which is located approximately 8 miles upstream from the Wells Dam.

The Wells Project is the chief generating resource for Public Utility District No. 1 of Douglas County (Douglas PUD). It includes ten generating units with a nameplate rating of 774,300 kW and a peaking capacity of approximately 840,000 kW. The design of the Wells Project is unique in that the generating units, spillways, switchyard, and fish passage facilities were combined into a single structure referred to as the hydrocombine. Fish passage facilities reside on both sides of the hydrocombine, which is 1,130 feet long, 168 feet wide, with a crest elevation of 795 feet in height.

The Wells Reservoir is approximately 30 miles long. The Methow and Okanogan rivers are tributaries of the Columbia River within the Wells Reservoir. The Wells Project boundary extends approximately 1.5 miles up the Methow River and approximately 15.5 miles up the Okanogan River. The surface area of the reservoir is 9,740 acres with a gross storage capacity of 331,200 acre-feet and usable storage of 97,985 acre feet at the normal maximum water surface elevation of 781 above mean sea level (msl).

1.2 Relicensing Process

The current Wells Project license will expire on May 31, 2012. Douglas PUD is using the Integrated Licensing Process (ILP) promulgated by Federal Energy Regulatory Commission (FERC) Order 2002 (18 CFR Part 5). Stakeholders consisting of representatives from state and federal agencies, tribes, local governments, non-governmental organizations and the general public have participated in the Wells Project ILP, from a very early stage, to identify information needs related to the relicensing of the Wells Project.

In August 2005, Douglas PUD initiated a series of Resource Work Group (RWG) meetings with stakeholders regarding the upcoming relicensing of the Wells Project. This voluntary effort was initiated to provide stakeholders with information about the Wells Project, to identify resource issues and to develop preliminary study plans prior to filing the Notice of Intent (NOI) and Pre-Application Document (PAD). The RWGs were formed to discuss issues related to the Wells Project and its operations.

The primary goals of the RWGs were to identify resource issues and potential study needs in advance of Douglas PUD filing the NOI and PAD. Through 35 meetings, each RWG cooperatively developed a list of Issue Statements, Issue Determination Statements and Agreed-

Upon Study Plans. An Issue Statement is an agreed-upon definition of a resource issue raised by a stakeholder. An Issue Determination Statement reflects the RWGs' efforts to apply FERC's seven study criteria to mutually determine the applicability of each individual Issue Statement. Agreed-Upon Study Plans are the finished products of the informal RWG process.

Douglas PUD submitted the NOI and PAD to FERC on December 1, 2006. The PAD included the RWGs' 12 Agreed-Upon Study Plans. The filing of these documents initiated the relicensing process for the Wells Project under FERC's regulations governing the ILP.

On May 16, 2007, Douglas PUD submitted a Proposed Study Plan (PSP) Document. The PSP Document consisted of the Applicant's Proposed Study Plans, Responses to Stakeholder Study Requests and a schedule for conducting the Study Plan Meeting. The ILP required Study Plan Meeting was conducted on June 14, 2007. The purpose of the Study Plan Meeting was to provide stakeholders with an opportunity to review and comment on Douglas PUD's PSP Document, to review and answer questions related to stakeholder study requests and to attempt to resolve any outstanding issues with respect to the PSP Document.

On September 14, 2007, Douglas PUD submitted a Revised Study Plan (RSP) Document. The RSP Document consisted of a summary of each of Douglas PUD's revised study plans and a response to stakeholder PSP Document comments.

On October 11, 2007, FERC issued its Study Plan Determination based on its review of the RSP Document and comments from stakeholders. FERC's Study Plan Determination required Douglas PUD to complete 10 of the 12 studies included in its RSP Document. Douglas PUD has opted to complete all 12 studies to better prepare for the 401 Water Quality Certification process conducted by the Washington State Department of Ecology (Ecology) and to fulfill its commitment to the RWGs who collaboratively developed the 12 Agreed-Upon Study Plans with Douglas PUD. These study plans have been implemented during the designated ILP study period. The results from the study plans have been developed into 12 Study Reports. Each report will be included in Douglas PUD's Initial Study Report (ISR) Document, which is scheduled for filing with FERC on October 15, 2008.

This report completes the Recreational Needs Analysis.

2.0 GOALS AND OBJECTIVES

The goal of this study was to research, describe, and quantify recreation and facility access needs at the Wells Project to be addressed over the term of the next license. Specific objectives included:

- Summarizing prior study findings to evaluate recreational use and demand within the Wells Project. This summary was based on results of the 2005 Wells Project Recreation Visitor Use Assessment, existing information from the FERC Form 80 documents for the Wells Project, Interagency Committee for Outdoor Recreation outdoor recreation participation survey, WDFW fisherman surveys, WDFW hunter surveys, City of Bridgeport's Marina Park surveys, and other relevant recreational information.
- Assessing the needs of Hispanic use of recreational facilities and resource areas.
- Assessing the adequacy of existing recreation facilities at the Wells Project to accommodate current and future recreation demand.
- Assessing the adequacy of public access at Wells Project recreation facilities.
- Assessing the adequacy of facility maintenance at Wells Project recreation sites.
- Developing a prioritized list of potential actions to address Wells Project recreation needs. The list included criteria such as demand, effectiveness, feasibility, and cost.

The needs analysis will provide information to Douglas PUD, as well as recreation resource managers, to support decision-making related to recreation use at the Wells Project.

3.0 STUDY AREA

The study area included recreation and access facilities within and adjacent to the Wells Project boundary. The Wells Project boundary extends from the tailrace of Wells Dam (RM 514.7) to the tailrace of Chief Joseph Dam (RM 544.5). The boundary also extends to RM 15.5 on the Okanogan River and RM 1.5 on the Methow River. Recreation and access facilities within the Wells Project boundary include parks, boat launches, trails, parking areas, fishing access sites, and wildlife lands access sites (Figure 3.0-1).

The study area included the Wells Project area and the study sites in Table 3.0-1. Statewide and regional information about current unmet demand and potential future demand were applied to the study. In addition, assessing regional uniqueness and significance of the Wells Project area's recreation resource opportunities was accomplished by asking specific questions on the visitor survey related to the Wells Project's primary recreation activities (see Section 5.1.3, Recreation Visitor Survey Study). Of particular significance are the following questions on the survey: (1) Why did you come to the Wells Project survey area? and (2) What percentage of time did you spend participating in the following activities?

Table 3.0-1 Study Sites

Site Designation	Site Description	River	Approx. River Mile	Primary Usage(s)
Columbia River Sites				
CO-1	Starr Boat Launch	Columbia	518.3	Trailerable Boat Launching
CO-2	City of Pateros Memorial Park (Docks)	Columbia	523.8	Boat Docking
CO-3	Winter Boat Launch	Columbia	523.9	Trailerable Boat Launching
CO-4	City of Brewster Columbia Cove Park (Dock and Swimming Area)	Columbia	529.7	Boat Docking and Swimming
CO-5	City of Brewster Columbia Cove Park (Boat Launch)	Columbia	529.8	Trailerable Boat Launching
CO-6	Chicken Creek Boat Launch	Columbia	537.3	Trailerable Boat Launching
CO-7	City of Bridgeport Marina Park (Boat Launch)	Columbia	543.1	Trailerable Boat Launching
CO-8	City of Bridgeport Marina Park (Swimming Area)	Columbia	543.3	Swimming
Methow River Sites				
ME-1	Methow Boat Launch	Methow	0.4	Trailerable Boat Launching
ME-2	City of Pateros Peninsula Park	Methow	0.5	Swimming
ME-3	Methow Fishing Access 1 (South Side of River)	Methow	1.2	Small Boat/Raft Launching and Bank Fishing
ME-4	Methow Fishing Access 2 (North Side of River)	Methow	1.5	Small Boat/Raft Launching and Bank Fishing
ME-5	Riverside Drive Recreation Access (At Tennis Courts, North Side of River)	Methow	0.9	Small Boat/Raft Launching and Bank Fishing
Okanogan River Sites				
OK-1	Cassimer Bar Fishing Access	Okanogan	1.3	Bank Fishing
OK-2	Okanogan River Informal Boat Launch 1	Okanogan	2.1	Trailerable Boat Launching
OK-3	Monse Boat Launch	Okanogan	5.2	Trailerable Boat Launching
OK-4	Okanogan River Informal Boat Launch 2	Okanogan	6.8	Trailerable Boat Launching

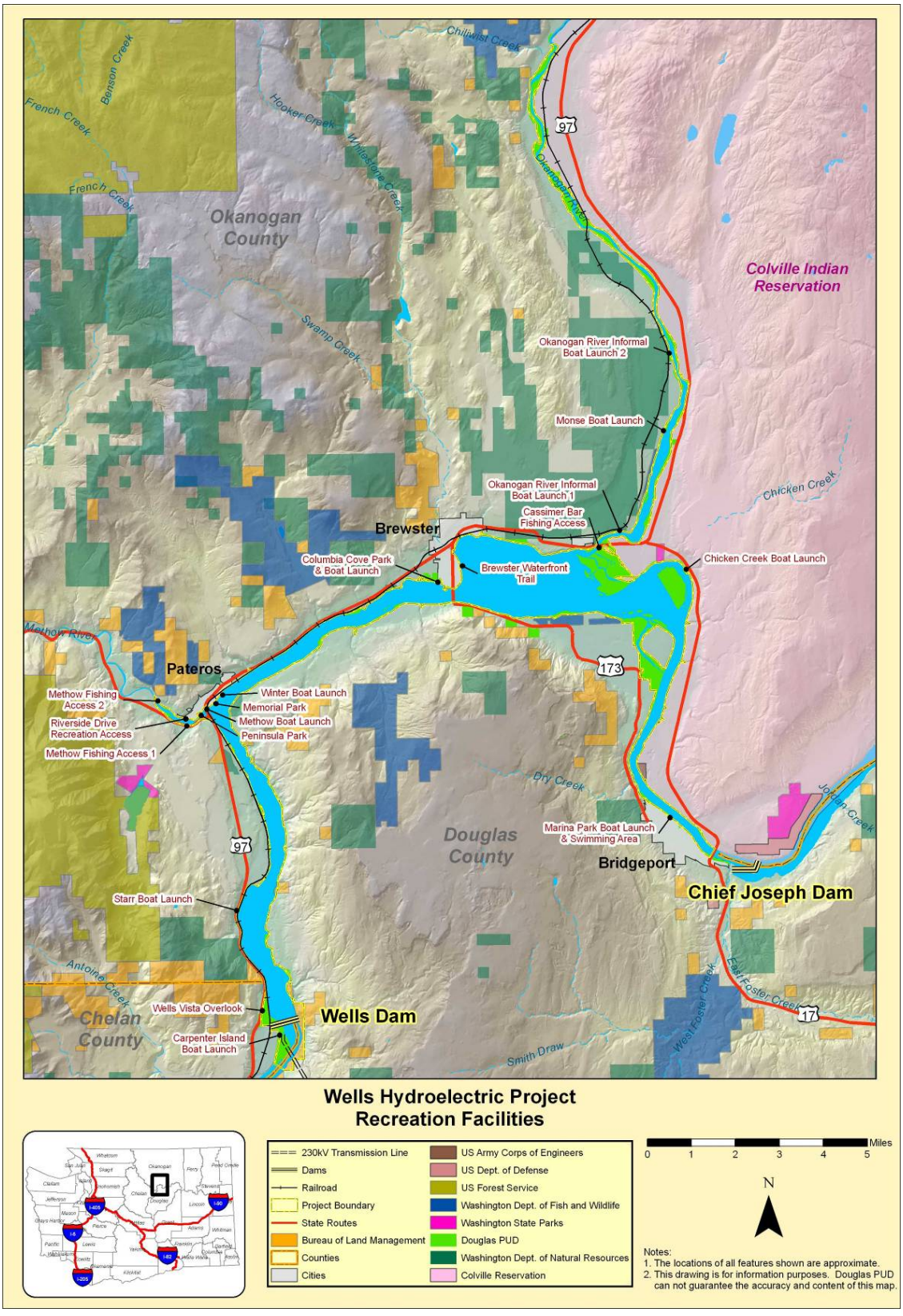

Figure 3.0-1 Location map of the Wells Project.

4.0 BACKGROUND AND EXISTING INFORMATION

4.1 Recreation Resource Work Group

As part of the relicensing process for the Wells Project, Douglas PUD established a Recreation Resource Work Group (RWG) which began meeting in November, 2005. This voluntary effort was initiated to provide stakeholders with information about the Wells Project, to identify potential resource issues and to develop preliminary study plans to be included into the Wells Pre-Application Document (PAD) (DCPUD, 2006).

Through a series of meetings, the RWG identified a set of resource issues that, in their judgment, matched with FERC's ILP study request criteria. The RWG then reviewed the existing project information and determined that several of these issues require additional information.

Based upon these discussions, the RWG proposed to conduct two studies. The need for these two studies was agreed to by all of the members of the Recreation RWG, including Douglas PUD. These two studies will help to inform future relicensing decisions and will fill data gaps identified by the RWG. The two studies proposed by the RWG include: 1) An Evaluation of Access to the Wells Reservoir as it Relates to Reservoir Fluctuations, Aquatic Plants and Sedimentation and 2) An Evaluation of Recreation Needs within the Wells Project. The proposed Recreation Needs Assessment will focus on collecting information pertinent to Recreation Issues, PAD Section 6.2.2.4, 6.2.2.5, 6.2.2.6 and 6.2.2.7 identified by the RWG.

The Issue Statement and Issue Determination Statement listed below were included in the PAD (section number included) filed with FERC on December 1, 2006:

4.1.1 Issue Statement (PAD Section 6.2.2.4)

Recreation proposals under the license need to consider Endangered Species Act (ESA), Americans with Disabilities Act (ADA), Electric Consumers Protection Act (ECPA), State Comprehensive Outdoor Recreation Plan (SCORP), County Shoreline Master Programs as well as local ordinances, laws, regulations and comprehensive plans.

4.1.2 Issue Determination Statement (PAD Section 6.2.2.4)

Douglas PUD agrees that proposals under the new license need to consider all of the above-mentioned laws, plans and regulations. These should be applied at existing and future recreation sites. The resource work group agrees that additional information is needed and a study is recommended during the two-year ILP study period. An evaluation of ADA compliance and other regulations will be considered in the Recreation Needs Assessment.

4.1.3 Issue Statement (PAD Section 6.2.2.5)

Existing recreation facilities may not meet future recreation needs through the duration of the next license term. Recreation plans under the new license should consider recreation trends and an analysis of the condition and capacity at recreation facilities.

4.1.4 Issue Determination Statement (PAD Section 6.2.2.5)

Douglas PUD completed a Recreation Visitor Use Assessment for the Wells Project conducted in 2005. This assessment will be useful in answering questions related to the current use of existing recreation facilities.

The existing Wells Project recreation sites were developed under the original license to provide safe and efficient access to Project lands and waters. Safe and efficient access to Project land and waters is a requirement of the original FERC license and is expected to be a requirement under the new long-term FERC license. Enhancements to existing facilities or the installation of new sites/facilities will be considered based upon projected use and capacity ratings, consistent with FERC recreation policies.

The current condition of existing recreation facilities and their ability to meet future needs is unknown. The resource work group agrees that additional information is needed and that a Recreational Needs Assessment should be conducted during the two-year ILP study period. This study should assess the condition of existing facilities and evaluate the ability of existing facilities to meet future recreation demands within the Wells Project. The Recreation Needs Assessment should also consider results from the Interagency Committee for Outdoor Recreation's (IAC) statewide outdoor recreation participation survey and the WDFW fishermen survey and additional recreation information from the Project area.

4.1.5 Issue Statement (PAD Section 6.2.2.6)

The new license should consider new facilities or enhancements to existing facilities (e.g., Chief Joe Hatchery, Fort Okanogan State Park and Interpretive Center, Fort Okanogan Overlook Site, Wells Visitor Center, Pateros Visitor Center, Alta Lake State Park and Wells Tracts off Pit Road) and should consider trails and trail linkages between communities.

4.1.6 Issue Determination Statement (PAD Section 6.2.2.6)

The resource work group agrees that a Recreational Needs Assessment is considered necessary during the two-year ILP study period. The results of this study will help identify potential enhancements to meet current, future and potential recreation needs within the Project, including the possibility of trails and trail linkages between communities. The study will help to determine whether adequate demand exists to justify the construction of new recreation facilities and will consider existing and future plans for recreation sites in the Project vicinity. Enhancements to existing facilities outside the Project will be considered if recreation needs cannot be met within the Project boundary.

4.1.7 Issue Statement (PAD Section 6.2.2.7)

Wells Dam may be a hindrance to river travel.

4.1.8 Issue Determination Statement (PAD Section 6.2.2.7)

Douglas PUD is not aware of an ongoing need for human river travel past Wells Dam. Wells Dam operators have identified only three instances where the public has requested portage either upstream or downstream of the dam in the past five years. In each instance, Douglas PUD has been able to adequately accommodate these individuals and transport their equipment. This issue may have a tie to the Project if a significant need is identified in the future.

The resource work group agrees that a study is not needed during the two-year ILP study period. An evaluation of portage options to address this issue should be considered in the Recreation Needs Assessment.

4.2 Recreation Visitor Use Assessment (2005)

Douglas PUD completed a Recreation Visitor Use Assessment during May to December of 2005 in an effort to collect information related to visitor use at Wells Project recreation sites (DTA, 2006). The primary goals of this study were to assist in the preparation of the PAD and to describe use levels, preferences, attitudes and characteristics of the Wells Project's primary recreation user groups. Specific objectives included:

- Describing recreation respondents' characteristics;
- Describing user preferences for recreation settings and facilities;
- Identifying possible recreation conflicts, crowding, or personal safety issues;
- Describing users' attitudes toward management actions;
- Describing recreation respondents' activities; and
- Identifying the amount, activity type and spatial and temporal distribution of existing recreation use.

A stratified systematic sampling strategy was chosen for the Recreation Visitor Use Assessment. To ensure that diversity in types of recreation users and variation in type of days visited, sampling was conducted at designated recreation sites and on the Wells Reservoir from May 24, 2005 through December 13, 2005, months that together account for the majority of use.

4.3 Recreation Action Plan

Ongoing recreation needs within the Wells Project are addressed through the Wells Recreation Action Planning process. The Wells Recreation Plan (1967), Wells Recreation Plan Supplement (1974), Public Use Plan (1982) and Recreation Action Plans (1987, 1992, 1997 and 2002) were established as part of compliance with Article 44 of the original FERC license. This long-term and ongoing planning and implementation process has helped in the development and maintenance of the sites previously described.

Following a two-foot pool raise amendment in 1982, Douglas PUD developed a Public Use Plan for the Wells Project. The plan analyzed the types of public recreation facilities that the Wells Reservoir can reasonably accommodate and discussed how those facilities can be developed and maintained. The information presented in the 1982 Public Use Plan included an analysis of recreation facilities within a 100-mile radius of the Wells Project.

In response to the 1982 Public Use Plan, the National Park Service (NPS) and State Parks recommended periodic updates (every five years) to the 1982 Public Use Plan. By FERC Order dated August 12, 1987, 40 FERC ¶ 62,157, this recommendation was made part of the Wells Project license resulting in updates to the 1982 Public Use Plan every five years. Douglas PUD's 1987 Recreation Action Plan, which is a supplement to the 1982 Public Use Plan, was supported by the NPS, Washington State Parks and Recreation Commission and the cities of Pateros, Brewster and Bridgeport. Douglas PUD has also published subsequent updates to the 1982 Public Use Plan in 1992, 1997, 2002 and 2007.

4.4 FERC Form 80

The FERC Form 80, "Licensed Hydropower Development Recreation Report" is a brief summary of the existing recreation conditions and facilities associated with the Wells Project. Based on FERC regulations, the forms were submitted every two years from 1967 – 1984, every four years from 1984 – 1996 and every six years since 1996. The most recent Form 80 was submitted to FERC in 2002.

FERC's Form No. 80 is used to gather information necessary for the Commission and other agencies to know what recreational facilities are located at licensed projects, whether public recreational needs are being accommodated by the facilities, and where additional efforts could be made to meet future needs.

4.5 Project Nexus

The Wells Project has direct and indirect effects on recreation activities within the Project boundary. The effects include providing public access to Project lands and waters, and the potential effects of Wells Project operations on recreational activities.

Douglas PUD has developed and provided major maintenance at numerous public recreation facilities along the Wells Reservoir. These facilities were developed to provide safe and reasonable access to Project lands and waters. Access to the Project will continue to be needed under the new license and this proposed study will help to determine whether additional facilities are needed to meet the demand in recreational use. In addition, Project recreation facilities may not currently be ADA compliant which could limit access for public use. It is unknown whether the existing facilities, in their current condition, can continue to adequately fulfill the expected level of recreation demand during the next license term.

The results of this study will be used to help identify existing and future recreation needs and will be useful during the development of protection, mitigation, and enhancement measures for the new long-term FERC license to operate the Wells Project.

5.0 METHODOLOGY

5.1 Assess Existing Unmet Demand

Existing recreation use does not always represent the total existing recreation demand because constraints may limit participation. While there are numerous potential constraints on recreation use (e.g., lack of free time, cost, geographic distance, lack of skills or equipment), a subset of participation constraints may be associated with site-specific management (e.g., limited access to lands or water, use limits or full occupancies at facilities, Project operations that diminish the quality of opportunities, or the lack of information about available recreation opportunities). To assess the general level of unmet demand for Project recreation resources, the following steps were performed:

Step 1: Assess statewide and regional unmet recreation demand information
Review and summarize relevant information from the 2002-2007 SCORP and other relevant local recreation data, including the SCORP Local Government Survey results and the Interagency Committee for Outdoor Recreation's (IAC) statewide outdoor recreation participation survey, which include regionalized recreation issues, and needs from local agencies involved in outdoor recreation management.

Step 2: Collect unmet Project area recreation demand information from visitor surveys, community leaders, and relevant research
Additional unmet demand information from the visitor surveys conducted in 2005 was used as part of this study. These surveys asked visitors if there are any reservoir or river recreation activities they are interested in participating in, but cannot because of some form of barrier or constraint.

To further understand the recreation needs of evening users as well as the growing Hispanic population in the region, interviews were conducted with local community leaders (e.g., social organizations, churches) and Fish and Game officers to understand recreation use and behavior during daytime and evening hours. Current research on the specific needs of Hispanic recreation users was also researched (See Appendix A).

Step 3: Identify potential activities with high unmet demand within the Wells Project area
Based on the review of unmet demand information derived from the Washington SCORP, the 2005 Recreation Use Assessment, Project monitoring data, Interagency Committee for Outdoor Recreation's (IAC) statewide outdoor recreation participation survey, and the summary of Hispanic recreation needs, potential activities with high unmet demand at the Wells Project were identified. The analysis also identified likely barriers or constraints on participation, and whether those are related to Project operations or recreation management decisions.

5.2 Assess Future Recreation Demand

This element of the study projected future recreation use at the Wells Project over the estimated period of the new license (30 to 50 years). Obviously, projecting the future is a speculative activity, especially over a 30-to-50-year period. These projections, though, can be useful for general planning purposes to identify potential management issues that may occur in the future. This approach included the following steps:

Step 1: Review existing recreation use trends
As past use often helps predict future use, reviewed trends of actual Wells Project recreation use from the Wells Project monitoring reports for Wells Reservoir, Interagency Committee for Outdoor Recreation's (IAC) statewide outdoor recreation participation survey, WDFW fishermen survey, Washington State Parks Survey, Washington Outdoor Recreation Survey (ORS), Washington fishing license sales, off-road vehicle (ORV) green stickers and boating vessel registrations for the counties where the majority of the Wells Project visitors originate from, local fishing guide activity, and recreation equipment sales.

Step 2: Review of existing population and recreation activity participation projections
Summarized existing information on future projections from the Washington Office of Financial Management on population growth rates for the counties where the majority of the Wells Project visitors originate, U. S. Census statistics for growth within and adjacent to the Wells Project, and other appropriate state sources on existing and future population growth.

Step 3: Review reasonably foreseeable events that may influence future use
Reasonably foreseeable events in the watershed may be expected to influence recreation use in the watershed over the license period. If an event is determined to be reasonably foreseeable, a qualitative assessment is made of its potential affect on future recreation use.

Step 4: Estimate future recreation use over the license period
Based on historical trends, future growth projections, and likely foreseeable actions in the watershed, professional judgment was used to estimate recreation use and facility utilization over the expected term of the new license (i.e., 30 to 50 years). These estimates must be considered very speculative and only provide a general indication of how recreation use is expected to change over the license period. The following steps were utilized to estimate recreation activity for the Okanogan, Douglas and Chelan County populations (16 years and older):

a. The calculation of participation estimates was based on the projection indices created from Bowker et al. (1999), who utilized the National Survey on Recreation and the Environment (NSRE) descriptive findings for populations 16 years and older, not institutionalized (Cordell et al.1996) to develop participation by millions 2000-2050 on 10-year increments.

b. The county projections are derived from national and regional participation projections. These are calculated based on the indices created for the nation and region, utilizing the same rate of increase index created by Bowker et al. (1999). To obtain the county level activity participation rates, the following steps were applied:

1. By county, the indexes from national and regional participation rates were multiplied by the base number of participants (represented in millions) then divided by the base population used in national and regional calculations (Bowker et al., 1999, pp. 323-349). This yields a national and regional participation rate for each activity by decade.

2. Next, the national and regional participation rates were multiplied by the estimated Okanogan, Douglas and Chelan County populations of individuals over the age of 16, consistent with the estimate parameters developed by Bowker et al. (1999). The population estimates came from the Washington Office of Financial Management, subtracting estimates of institutionalized individuals from the Department of Corrections.

5.3 Regional Uniqueness and Significance Assessment

The assessment of regional uniqueness of the Wells Project's primary recreation opportunities was performed as follows:

Step 1: Analyze results of visitor questionnaires
The results of the recreation visitor use assessment confirmed the Wells Project's primary recreation activities.

Step 2: Identify regional recreational opportunities
The geographic draw of the Wells Project's top primary recreation opportunities was identified by assessing the geographic extent of visitors' origins and location of the alternative recreation resource areas where visitors participate in their primary recreation activities.

Step 3: Assess uniqueness of the Wells Project-related recreation opportunities
For the Wells Project's most popular primary recreation activities, the study identified whether these recreation opportunities are of local, regional, or state significance. In addition, text describes what is unique and special about the most popular recreation opportunities based on information from regional resource information.

5.4 Public Access Analysis

Access to the Wells Project's public use areas, by both land and water, has been evaluated as part of this study. Existing access facilities were rated as high, medium, or low quality. Opportunities and constraints within the Wells Project were identified, including compatibility with Americans with Disabilities Act (ADA). Public access (land and water) in the Wells Project area was evaluated by:

- Reviewing ownership maps, topographic maps, and aerial photography;
- Boating to dispersed sites and use sites along the shoreline, driving roads to access sites, and walking formal and informal user trails on lands designated as Project access sites or wildlife areas;
- Defining existing water trail routes along the reservoir, current shoreline watercraft launch sites, constraints to watercraft access along the reservoir, and overnight stop-over sites; and
- Displaying public access sites and routes within the Wells Project on GIS maps.

The analysis includes tables and maps summarizing locations where: (1) current facilities for access to the Wells Project are safe and efficient; (2) access is highly constrained; and (3) future improvements could be implemented. Viable options for potential new or enhanced public access for further consideration were identified.

5.5 Needs Assessment

The needs assessment provides a qualitative assessment of the recreation needs based on integrating the findings from the other recreation components of this study and other related studies. The assessment involved a four-step process in which relevant Wells Project recreation opportunities were described, relevant Wells Project recreation issues were identified, potential actions to address Wells Project-related issues identified, and site-specific measures proposed, when appropriate. These steps are discussed below:

Step 1: <u>Summarize Wells Project-related recreation opportunities at recreation resource areas</u>

The first step in the needs assessment is to integrate recreation study findings into a summary of Wells Project-related recreation opportunities at recreation resource areas. The existing condition of the recreation opportunity as well as the likely condition of the opportunity over the license term is described.

Step 2: <u>Summarize major recreation issues for each recreation resource area</u>

Based on the projected license term and the condition of recreation opportunities within recreation resource areas, the recreation issues within the resource area are confirmed.

Step 3: Develop a list of actions to address Wells Project-related issues
A list of prioritized actions that address Wells Project-related recreation issues is developed for consideration. Effectiveness, feasibility, and costs are used to identify actions and to prioritize these actions.

Step 4: Identify appropriate additional recreation measures for the Wells Project
The last step of the process is to consult with relicensing participants to review study results and to finalize Wells Project mitigation and enhancement measures to include in the FERC license application.

6.0 RESULTS

6.1 Assess Existing Unmet Demand

Relevant information from the 2002-2007 Washington SCORP and other relevant recreation data were reviewed and summarized, including the SCORP Local Government Survey results and the Washington State Recreation and Conservation Office statewide outdoor recreation participation survey, with regionalized recreation issues and needs from local agencies involved in outdoor recreation management.

The focus of this assessment was to identify possible recreation activities with substantial unmet demand with a qualitative discussion of participation constraints and whether these constraints were likely affected by Project operations.

6.1.1 Statewide and Regional Unmet Recreation Demand Information

6.1.1.1 Assessment of Statewide Unmet Recreation Demand

The 2002-2007 SCORP and Washington State Recreation and Conservation Office statewide outdoor recreation participation survey were reviewed and summarized. Results from the Washington Outdoor Recreation Survey (ORS) were also reviewed to identify outdoor recreational activity among Washington residents.

Washington State Comprehensive Outdoor Recreation Plan

The 2002 SCORP, among other things, determines outdoor recreation issues that are currently the problems and opportunities most critical in Washington. The plan identified the following statewide major recreation issues:

- Recreation is important to everyone
- Crowding is a constraint
- Notable increase in recreation specialization
- User conflicts in natural settings
- Land and facilities are available, but often are not accessible
- Lack of accessible urban trails, walking areas, and bike lanes
- Perceptions of restricted access (confusing permit systems, fees, closures, etc)

- Agencies do a poor job of representing the interests of user groups
- Notable lack of maintenance
- Little public support of paying fees for access

An element of the SCORP identified the following as the top recreational activities in Washington with the highest latent demand (Table 6.1-1). Overall, the results showed Washington residents most often engaged in low cost activities that were close to home and participated in multiple activities that intersected throughout the categories.

Table 6.1-1 Washington residents' recreation activities with high latent demand.

Activity	Percent of State Population
Walking/hiking	53.0
Outdoor team and Individual sports	44.8
Nature activities	43.0
Sightseeing	23.0
Bicycle riding	21.0
Indoor	20.5
Picnicking	20.0
Water activities	19.0
Snow/ice activities	18.0
Fishing	13.0
Camping	13.0
0ff-road vehicles	8.9
Hunting/shooting	6.1
Equestrian activities	3.0
Air activities	1.7

Table 6.1-2 presents the top 20 of the 170 specific activities Washington residents participated in, by type or location.

Table 6.1-2 Washington residents' participation in specific activities by type or location.

Activity	By Type or Location	Participants (rounded)
Bicycling	On roads or streets	790,000
Gardening	Backyard	723,000
Walking	On sidewalks	649,000
Walking	On roads and streets	609,000
Sightseeing	Scenic areas	587,000
Walking with a pet	Undesignated	547,000
Indoor	Social events	543,000
Picnicking	Undesignated	459,000
Picnicking	Designated picnic tables	448,000
Walking	In a park/trail setting	448,000
Sightseeing	Cultural/historical	433,000
Observing/photographing nature	Birds	373,000
Sightseeing	Public facility	356,000
Walking with a pet	On-leash in a park	321,000
Observing/photographing nature	Animals	304,000
Sledding/tubing/snow play	Snow-ice settings	291,000
Walking (day hiking)	Mountain and forest trails	279,000
Playground activities	At a park	276,000
Indoor	Activity center uses	273,000
Beachcombing	Shores areas	271,000

Along with identification of the activities in which respondents participated, the frequency of that participation provides greater insight into the outdoor recreation participation of Washington residents. Table 6.1-3 displays the average number of times that respondents participated in major outdoor activities.

Table 6.1-3 Average yearly activity participation of Washington residents.

Activity	Average events per year
Walking with a pet	15.0
Jogging and running	13.5
Walking	12.2
Gardening (flowers & vegetables)	11.8
Skateboarding	10.1
Soccer	9.9
Football	9.6
Tennis	9.3
Baseball	9.0
Basketball	8.8
Bicycle touring (roads & highways)	8.6
Softball	8.3
Playground activities	8.0
4-wheel vehicles	8.0
Swimming in a pool	8.0
Badminton	7.7
Bicycle riding for recreation	7.5
Equestrian activities	7.4
Observing/photographing wildlife nature	6.7
Volleyball	6.3
Golf	6.1

Besides acknowledging the differences among activities, the SCORP identified difference in recreation resources by emphasizing that nearly half (48 percent) of outdoor recreation in Washington occurred on local lands and facilities rather than federal, state, and private lands. This suggests a high demand for local outdoor recreation resources and there is evidence of increasing competition for access to recreation areas. This is not to diminish the importance of demand for outdoor recreation resources away from home. During peak summer use, Washington state lands have seen over 400,000 people at one time and many state parks are reserved to capacity nine months in advance. The increased demand for outdoor recreation has resulted in a loss of the possibility to spontaneously take a camping trip or engage in an impromptu ball game because those resources are heavily used and available in limited supply. Therefore, gaining access to many outdoor recreation resources often requires prior planning.

<u>Washington State Recreation and Conservation Office Statewide Outdoor Recreation Participation Survey</u>

In 1995, the Washington State Recreation and Conservation Office produced a list of the top 10 “popular and growing” outdoor recreation activities. They are listed below:

1. Walking for pleasure/exercise
2. Running/jogging
3. Visiting zoos, fairs

4. Bicycling
5. Mountain bicycling
6. Tent camping (camp grounds)
7. Tent camping (backcountry)
8. RV camping
9. Day hiking
10. Attending sports events

Recently, the Washington State Recreation and Conservation Office developed a number of assumptions regarding the outdoor recreation needs of Washington State's residents.

- Streets and roads are local facilities
- Athletic fields are typically managed by local agencies
- Nature activities typically occur on undeveloped land that is managed by state and federal agencies
- Although private land accounts for approximately half of all statewide camping, all of the land management agencies offer camping
- OHV use occurs primarily at "locally-managed sports parks" and on private lands (often owned by timber companies)

Based on the assumptions listed above, these lands and facilities may or may not be designated as recreation areas. Hence, the greatest demand for outdoor recreation is at the local level and often outside of the park setting.

Additionally, there is some evidence suggesting a decline in outdoor recreation participation in Washington State. For example, the 1990 survey results suggested that 76 percent of those living in Washington State walked or hiked recreationally. In contrast, current survey results report that 53 percent participate in these activities. This difference may be due in part to the growing population placing a strain on outdoor recreation resources and contributing to crowding in limited recreation areas. Likewise, there is a growing number of inactive people in Washington and as many as half of the state's population is experiencing health risks associated with living inactive lifestyles.

Washington Outdoor Recreation Survey (ORS)

The most frequently occurring recreational activities in 2006 included walking without a pet (3.5 million times), observing or photographing wildlife or nature (3.1 million times), walking with a pet (2.7 million times), jogging or running (2.3 million times), and playground recreation (2.2 million times) (see Table 6.1-3 above).

The most frequently mentioned activities that Washingtonians wanted to do more of in the 12 months following the survey interview included sightseeing (46.9 percent), picnicking or cooking outdoors (39.4 percent), hiking (33.5 percent), tent camping with a car or motorcycle (33.4 percent), and swimming or wading at a beach (28.4 percent) (Figure 6.1-1). Walking and hiking activities, followed by exercise and sports activities, had the highest levels of participation in 2006. Equestrian and air activities showed the lowest participation rates.

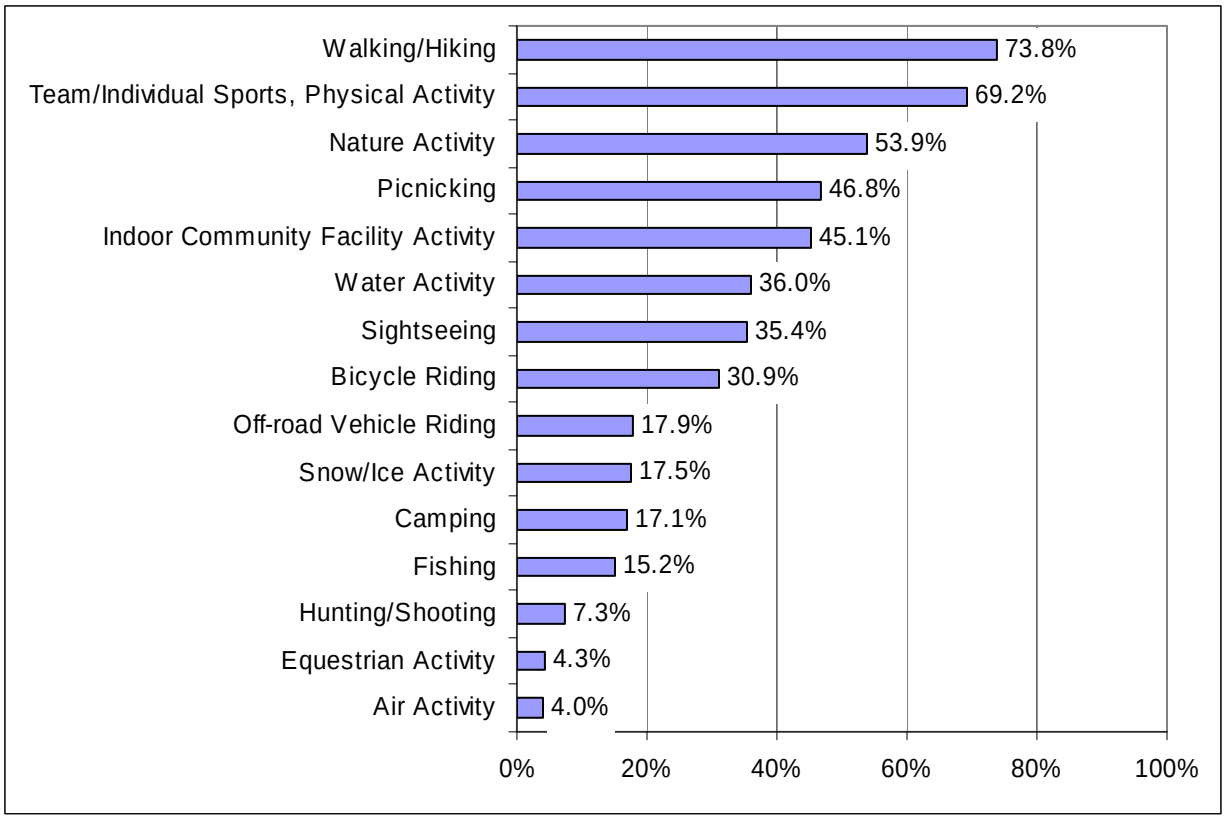

Figure 6.1-1 Ranking of major activity areas by average month participation.

Table 6.1-4 shows the top 20 activities ranked by prevalence in the average month. In 2006, walking without a pet was the most prevalent activity in the average month. This activity was followed closely by picnicking (48.5 percent) and sightseeing (nearly 43 percent).

Finally, the desire of Washington residents to participate in activities over the next 12 months was measured to provide a sense of current preference for those activities. Table 6.1-5 shows the top 20 activities ranked by the prevalence of expressed desire to do more of the activity over the 12 months following the survey interview. The greatest percentage of Washingtonians mentioned sightseeing in general as a recreation activity they would like to do more of in the coming 12 months.

Table 6.1-4 Top 20 recreation activities in 2006, ranked by average month participation.

Activity	Population %*	±	Population N*	±
Walking without a pet	55.2	2.9	3,473,870	211,925
Picnic, BBQ, or cookout	48.5	2.9	3,050,969	219,437
Sightseeing	42.7	2.9	2,686,008	199,168
Walking with a pet	36.4	2.8	2,290,621	197,488
Playground recreation	34.3	2.9	2,157,113	207,155
Bicycle riding	32.6	2.9	2,049,743	203,620
Flower or vegetable gardening	32.1	2.7	2,020,627	175,769
Observing or photographing wildlife or nature	31.2	2.7	1,961,441	171,944
Social event	30.9	2.7	1,942,400	180,175
Jogging or running	29.7	2.7	1,869,554	186,576
Aerobics or fitness activities at a facility	24.9	2.6	1,562,726	177,519
Swimming in a pool	23.1	2.6	1,452,095	172,217
Hiking	20.5	2.4	1,288,746	155,902
Beachcombing	19.9	2.4	1,250,857	154,484
Swimming or wading at a beach	18.6	2.3	1,169,260	152,685
Weight conditioning at a facility	18.2	2.3	1,146,819	147,094
Basketball	16.8	2.2	1,058,079	147,109
Gathering or collecting things in nature setting	16.2	2.2	1,018,397	139,733
Class or instruction	13.3	2.1	833,466	132,370
Soccer	13.2	2.1	826,925	138,917

* Monthly average in 2006.

Table 6.1-5 Top 20 recreation activities in 2006, ranked by preference.

Activity	Population %*	±	Population N*	±
Sightseeing – in general	47.7	2.9	2,996,377	215,786
Picnicking – in general	39.4	2.9	2,478,575	200,292
Hiking	34.2	2.8	2,153,345	189,614
Tent camping with a car or motorcycle	33.4	2.9	2,097,926	205,270
Swimming or wading at beach	28.4	2.6	1,788,283	176,045
Sightseeing – specific type	27.3	2.6	1,715,422	170,698
Bicycle riding – in general	27.2	2.7	1,707,780	186,155
Observing or photographing wildlife or nature	25.8	2.5	1,623,609	162,870
Picnic, BBQ, or cookout – location not specifically designated	25.7	2.6	1,619,010	173,482
Walking and hiking – in general	25.7	2.6	1,618,522	173,875
Picnic, BBQ, or cookout – site specifically designated	25.6	2.7	1,608,425	182,823
Flower or vegetable gardening	25.3	2.6	1,591,943	171,205
Bicycle riding	24.8	2.6	1,561,060	175,593
Walking without a pet	24.8	2.4	1,558,496	155,704
Social event	24.5	2.5	1,541,056	161,304
Skiing	24.0	2.6	1,511,369	169,348
Equestrian activities – in general	23.8	2.6	1,494,916	172,043
Motor boating	23.6	2.5	1,483,166	162,572
Camping – in general	21.9	2.5	1,378,868	164,859
Beachcombing	21.7	2.4	1,366,781	159,511

* Monthly average in 2006.

Table 6.1-6 provides the rankings of the main activity categories from the 2006 survey compared with those reported in 2002 from the 1999–2000 survey. The activities that moved up the rankings the most number of places from 2002 to 2006 include aerobics or fitness activities at a facility, inner tubing or floating, badminton (all moving up 20 places), football (19 places), baseball (18 places), and snow play (16 places). Those activities that moved down the rankings the most number of places include equestrian activity (21 places), activity with firearms (19 places), archery (17 places), skateboarding (15 places), and swimming (11 places). The apparent drop in the rankings for snowmobiling was most likely due mainly to its having been grouped with ATV riding on the previous survey and measured separately in 2006.

Table 6.1-6 Ranking of participation in main activity categories by survey year.

	Year	
Activity	**2006***	**2002**
Picnic, BBQ, or cookout	1	9
Walking without a pet	2	1
Swimming or wading at a beach	3	14
Sightseeing	4	3
Flower or vegetable gardening	5	4
Swimming in a pool	6	12
Walking with a pet	7	5
Playground activities such as swings or slides	8	13
Bicycle riding	9	6
Social event	10	11
Observe or photograph wildlife or nature	11	2
Jogging or running	12	15
Aerobics/fitness activities at a facility	13	33
Beachcombing	14	21
Sledding, inner tubing, other snow play	15	31
Hiking	16	8
Motor boating	17	18
Weight conditioning at a facility	18	24
Camping with a car or motorcycle	19	26
Basketball	20	28
Gather or collect things in a nature setting	21	7
Recreational vehicle camping	22	16
Class or instruction	23	29
Golf	24	10
Inner tubing or floating	25	45
4-wheel drive vehicle	26	23
Soccer	27	36
Canoeing, kayaking, row boating, other hand-powered Boating	28	38
Activity center	29	27
Fishing from a private boat	30	19
Fishing from a bank, dock, or jetty	31	17
Baseball	32	50
Visit a nature interpretive center	33	20
Volleyball	34	46
Skiing	35	25
Tennis	36	32

Table 6.1-6 Ranking of participation in main activity categories by survey year.

Activity	Year 2006*	2002
Football	37	56
Roller or in-line skating	38	30
ATV or dune buggy	39	37
Softball	40	53
Firearms	41	22
ATV riding on snow or ice**	42	**44
Camping in a boat	43	55
Climbing or mountaineering	44	54
Badminton	45	65
Motorcycle	46	35
Arts and crafts class or activity	47	40
Fishing for shellfish	48	39
Snowboarding	49	43
Backpacking at a primitive location	50	51
Sail boating	51	59
Ice skating	52	47
Personal watercraft, such as a Jet Ski	53	52
Water skiing	54	42
Equestrian activities	55	34
Skateboarding	56	41
Flying gliders, ultralights, aircraft	57	49
Court games like handball, racquetball, and squash	58	58
Bicycle camping	59	64
Scuba or skin diving	60	60
Snowmobiling**	61	**44
Camping with a kayak or canoe	62	62
Snowshoeing	63	61
White water rafting	64	66
Archery	65	48
Lacrosse	66	71
Fishing with a guide or charter	67	63
Bicycle touring	68	57
Bungee jumping	69	73
Surfboarding	70	69
Rugby	71	72
Sky diving, parachuting	72	74
Wind surfing	73	67
Hot air ballooning	74	68
Paragliding, hang gliding	75	70

* Based on peak month data, therefore the lower bound estimate of participants in 2006.

** Snowmobiling and ATV riding were combined in one category in 2002

Relative to the Wells Project, based on the results of the 2005 Recreation Visitor Use Assessment Survey, fishing, boating, swimming, hiking, picnicking, and camping were the most common activities reported by visitors to the Wells Project area. Therefore, results from the Washington State Outdoor Recreation Survey were reviewed for each of these specific activities.

Fishing

Washington State Survey

Four categories of recreational fishing (fishing for shellfish; fishing from a bank, dock, or jetty; fishing from a private boat; and fishing with a guide or charter) were included on the survey questionnaire. During 2006 SCORP results, roughly equivalent percentages of Washington residents (at least 17 percent) participated in fishing from a bank, dock, or jetty and fishing from a private boat. However, fishing was engaged in more frequently from a bank, dock, or jetty (over 2.3 million times) than from a private boat (over 1.4 million times).

Wells Project Area Visitor Survey-2005

With respect to the Wells Project, fishing was reported as the most common primary reason for visiting all six resource areas. Within the Okanogan resource area, the highest percentage of respondents (62.5%) came specifically for fishing, whereas the other resource areas had a broader distribution of reasons for coming to the areas.

Participants fishing from a boat overall were dedicated to this activity, with 56.8% of participants spending 76-100% of their time engaged. Brewster, Bridgeport, and the Okanogan resource area visitors reported the highest overall participation in fishing from a boat.

The greatest number of participants reporting fishing from shore came from the Wells Overlook and Brewster resource areas. Of those fishing from shore, the time allotted to fishing from shore was relatively split between 1-25% (38.6% of respondents) and 76-100% (36.8% of respondents) respectively.

Respondents engaged in fishing from a river or stream was relatively low overall. However, of those that were engaged in fishing from a river or stream, 59% or the overall majority were focused on this activity, spending 76-100% of their time engaged.

Boating/Swimming/Water Activities

Washington State Survey

Twelve categories of recreational water activities were included on the ORS questionnaire. These main categories were beachcombing, swimming or wading at a beach, surfboarding, wind surfing, inner tubing or floating, white water rafting, hand-powered boating, sail boating, personal watercraft, motor boating, water skiing, and scuba or skin diving. The category that the highest percentage of Washington residents participated in during 2006 was swimming or wading at a beach (at least 58.4 percent). Most residents (at least 44.7 percent) went swimming or wading at freshwater beaches. Considering all settings, Washingtonians went swimming or wading at beaches over 5.1 million times during 2006. On average in 2006, 28.4 percent of Washington residents wanted to do more swimming or wading at a beach in the next 12 months. The next highest levels of interest were expressed for motor boating (23.6 percent) and for beachcombing (21.7 percent).

Wells Project Area Visitor Survey-2005

Within the Wells Project Area, swimming was reported highest at Brewster, Bridgeport, and Pateros, which intuitively makes sense due to access and the fact that these are primary population areas. Logically, the majority (74.5%) of those reporting swimming, spent 1-25% of their time engaged in this activity.

Rafting activity within the Wells Project was limited to a short amount of time dedicated to this activity (1-25%) on the Methow River.

Of the 23 participants engaged in jet skiing, the majority (56.5%) spent a relatively short amount of time overall (1-25%) in the Wells Overlook, Pateros, and Brewster resource areas.

Kayaking was reported by a very small number of respondents (n=4), with 3 respondents reporting engaging in kayaking from the Brewster resource area and 1 from the Okanogan resource area.

Canoeing overall had very little participation, with only 4 respondents reporting canoeing at all, the majority of which were engaged 1-25% of the time.

Hiking/Walking

Washington State Survey

In 2006, most Washington residents participated in walking without a pet (at least 67.2 percent). The most prevalent settings for walking without a pet were sidewalks (at least 57.3 percent), park or trail settings (at least 47.8 percent), and roads or streets (at least 42.4 percent). At least 47.4 percent of Washingtonians walked with a pet in 2006, at least 30.9 percent hiked, and at least 9.9 percent participated in climbing or mountaineering. On average in 2006, of the various walking and hiking activities, Washington residents expressed the greatest interest in doing more hiking (34.2 percent) in the next 12 months.

Wells Project Area Visitor Survey-2005

Of those reporting hiking as an activity, the majority (78.6%) engaged in hiking 1-25% of their day. The greatest number of respondents who actually reported hiking were from the Pateros resource area, followed by the Bridgeport area.

Picnicking

Washington State Survey

During 2006, at least 78.4 percent of Washington residents participated in a picnic, barbecue, or cookout. Most residents participated at a location not specifically designated for picnicking activity (at least 63.2 percent). Considering all settings, Washingtonians had a picnic, barbecue, or cookout over 14 million times during 2006. On average in 2006, about one-quarter of Washington residents wanted to do more picnicking, barbecues, or cookouts in the next 12

months in locations not specifically designated for the activity (25.7 percent) or in a site specifically designed for it (25.6 percent).

Wells Project Area Visitor Survey-2005

Of those surveyed, 51 respondents reported picnicking. The highest percentage of picnickers was reported from the Brewster, Pateros, and Bridgeport resource areas. A majority of picnickers (54.9%) spent 1-25% of their time engaged in this activity.

Camping

Washington State Survey

During 2006, most Washington residents participated in tent camping with a car or motorcycle (at least 24.6 percent). The next most prevalent camping activity was recreational vehicle camping (at least 20.3 percent). The most prevalent setting for tent camping with a car or motorcycle was campgrounds (at least 17.4 percent). With a prevalence of at least 10.2 percent, camping in a boat showed the third highest participation of Washingtonians. For both activities, campgrounds were the most prevalent setting (6.7 percent and 5.2 percent, respectively). On average in 2006, one-third of Washington residents expressed the interest in doing more tent camping with a car or motorcycle (33.4 percent) in the next 12 months. Lower levels of preference were shown for more recreational vehicle camping (20.6 percent) and more camping in general (21.9 percent).

Wells Project Area Visitor Survey-2005

Relaxing/Camping was a frequent activity reported by 149 respondents overall. The greatest percentage of those reporting relaxing/camping came from the Pateros resource area respondents (32.9%), followed by respondents from the Bridgeport area (30.2%).

Table 6.1-7 describes the average activity participation overall and the average percentage of time spent by participants in these activities.

Table 6.1-7 Average activity participation for Wells Recreation Area overall.

Activity*		Time Spent Engaged in Activity Overall			
		1-25%	26-50%	51-75%	76-100%
Boating	# participated	28	25	9	24
	% participated	32.6	29.1	10.5	27.9
	% overall	**7.8**	**6.9**	**2.5**	**6.7**
Rafting	# participated	3	0	0	0
	% participated	100.0	0.0	0.0	0.0
	% overall	**0.8**	**0.0**	**0.0**	**0.0**
Jet skiing	# participated	13	6	2	2
	% participated	56.5	26.1	8.7	8.7
	% overall	**3.6**	**1.7**	**0.6**	**0.6**
Fishing (boat)	# participated	20	12	9	54

Table 6.1-7 Average activity participation for Wells Recreation Area overall.

Activity*		Time Spent Engaged in Activity Overall			
		1-25%	26-50%	51-75%	76-100%
	% participated	21.1	12.6	9.5	56.8
	% overall	**5.6**	**3.3**	**2.5**	**15.0**
Fishing (shoreline)	# participated	22	12	2	21
	% participated	38.6	21.1	3.5	36.8
	% overall	6.1	3.3	0.6	5.8
Fishing (stream/river)	# participated	3	6	0	13
	% participated	13.6	27.3	0.0	59.1
	% overall	**0.8**	**1.7**	**0.0**	**3.6**
Canoeing	# participated	2	1	0	1
	% participated	50.0	25.0	0.0	25.0
	% overall	**0.6**	**0.3**	**0.0**	**0.3**
Swimming	# participated	41	8	0	6
	% participated	74.5	14.5	0.0	10.9
	% overall	**11.4**	**2.2**	**0.0**	**1.7**
Picnicking	# participated	28	12	1	10
	% participated	54.9	23.5	2.0	19.6
	% overall	**7.8**	**3.3**	**0.3**	**2.8**
Horseback riding	# participated	4	0	0	0
	% participated	100.0	0.0	0.0	0.0
	% overall	**1.1**	**0.0**	**0.0**	**0.0**
Relaxing/camping	# participated	33	54	15	47
	% participated	22.1	36.2	10.1	31.5
	% overall	**9.2**	**15.0**	**4.2**	**13.1**
Kayaking	# participated	1	1	1	1
	% participated	25.0	25.0	25.0	25.0
	% overall	**0.3**	**0.3**	**0.3**	**0.3**
Hiking/walking	# participated	22	5	0	1
	% participated	78.6	17.9	0.0	3.6
	% overall	**6.1**	**1.4**	**0.0**	**0.3**
Bicycling	# participated	10	2	1	1
	% participated	71.4	14.3	7.1	7.1
	% overall	**2.8**	**0.6**	**0.3**	**0.3**
Hunting	# participated	2	0	1	5
	% participated	25.0	0.0	12.5	62.5
	% overall	**0.6**	**0.0**	**0.3**	**1.4**
Wildlife viewing	# participated	17	7	0	2
	% participated	65.4	26.9	0.0	7.7
	% overall	**4.7**	**1.9**	**0.0**	**0.6**

*** None of the respondents surveyed reported participating in ORV use.**

Washington State Parks Survey

Washington State Parks and Recreation Commission conducted a survey to determine state park use, opinions regarding state park managing and funding, and camping/RV participation. This survey found that just over half (54 percent) of Washington residents visited a state park in the past 2 years. Most of these visits were day-use visits (72 percent) and almost half (44 percent) of the visitors have stayed overnight at least once during the 2-year span. Deception Pass, Riverside, and Ocean City are among the most popular state parks. About half (51 percent) of the visits occurred in the summer. Most repeat visitors chose to visit different parks (72 percent) rather than returning to the same park each time.

Most overnight visitors stayed in tents (51 percent) and RVs (40 percent); about 1 in 10 visitors stayed in rented one-room cabins. The majority of visitors (88 percent) had utilized the comfort stations. Overnight facilities received high marks and state parks seem to rate comparably to private campgrounds. Most respondents suggested that the parks are well managed (72 percent). Although many respondents (44 percent) stated that they did not know if the parks were well funded, 25 percent agreed that they were well funded and 34 percent felt that the parks were not well funded. In contrast, 94 percent of the responded stated that well-funded state parks were important to them.

Participants responded to questions about their interest in renting cabins and participating in programs. Interest in renting cabins appeared high and many participants expressed interest in participating in programs that ranged from short tours to weekend long workshops.

Visitors utilized state parks to enjoy nature and the outdoor, to get away, reduce stress/relax, to spend time with family and friends, and to be active and healthy. Approximately two-thirds (66 percent) stated that the state park was their primary destination. Lack of time was reported as the greatest constraint (31 percent). Age/health (20 percent) and lack of interest (10 percent) were also popular responses. Parking fees were mentioned as a constraint (34 percent). Decisions to visit state parks were evenly split between spontaneous and planned visits. The parks location and familiarity to the respondent were influential in choosing a park to visit. Approximately 1 in 5 respondents utilize private campgrounds in addition to state parks. Almost 1 in 5 Washington residents own an RV; this includes trailers.

Recreation Issues in Washington State

It is clear that natural settings are an important part of outdoor recreation opportunities in Washington State. The fact that high numbers of individuals participated in activities that are in some way dependent on natural settings reveals the importance of access to natural areas that are designated for recreational use. Understanding public perception of available lands and facilities is an important aspect of evaluating the current need. Although the Washington SCORP document included a limited account of public perceptions, focus groups and public meetings that were held in 2001 suggested that:

- the value of recreation spans across socioeconomic boundaries
- crowding is perceived to be a result of population growth

- supply of outdoor recreation resources is out of balance
- lack of access is a greater concern than lack of supply
- public agencies are perceived as unresponsive

Aside from public land management agencies, private utilities play an important role in providing public outdoor recreation resources. Recreation and Conservation Office recommends that "non-federal hydropower project operators enhance inventory with trails and paths for walking and bicycling, manage dispersed shoreline camping, improve access for on-water recreation, and improve opportunities for non-consumptive interaction with nature including fish and wildlife."

6.1.2 Wells Project Area Recreation Demand Information from Visitor Surveys, Spot Count Observations, Community Leaders, and Current Research

The Recreation Visitor Use Assessment survey, conducted in 2005, was utilized to understand unmet demand as well. Wells Project area spot count observations were also employed to identify recreation use. To further understand the recreation needs of evening users, local community groups and Fish and Game officers were consulted.

6.1.2.1 Wells Project Area Recreation Demand Information from Visitor Surveys

The 2005 Recreation Visitor Use Assessment Survey asked visitors several questions about other activities that should be offered but are currently unavailable, if they would like to see any changes in the Wells Project area, the adequacy of the current amount of educational/interpretive opportunities, and their freedom to choose from activities in the Wells Project Recreation area.

The majority of respondents (62 percent) thought no other activities or services needed to be offered. In addition, less than 50 percent indicated that changes needed to be made. Those who did suggest changes desired improving or adding facilities such as picnic areas, restrooms, and boat launches. Over 75 percent of respondents also indicated that the directional and information signs as well as the educational/interpretive opportunities in the areas were adequate. Generally, respondents agreed their trips were enjoyable and they were free to choose a variety of activities. Based on the visitor survey results, there is minimal unmet recreation demand at the Wells Project recreation area and respondents were generally satisfied with their experience.

6.1.2.2 Wells Project Area Demand Spot Count Observations

To estimate recreation use along shorelines of rivers, at the reservoir, and on water surfaces of the reservoir, the survey team conducted a roving use spot count survey using a stratified two-stage (geographic and temporal) probability sampling approach (Malvestuto, 1996; Pollock et al., 1994). The spot count was stratified by recreation resource areas, type of day (weekdays, non-holiday weekends, holiday weekends, and opening fishing or event weekends), and time of day (mornings from 7 AM – 11 AM; afternoon from 11 AM to 2 PM; and evenings from 2 PM to 7 PM) during summer months (May-September); 8 AM-11 AM, 11 AM-2 PM, and 2 PM – 5 PM during off-season.

Surveyors were instructed to count the number of vehicles, trailers, boats, people, day groups, and the types of activities in which users were engaged. At dispersed areas, overnight groups were differentiated from day-use groups by the presence of camping equipment or the results of an on-site recreation respondent survey (if conducted with user group). To estimate boating and tubing use that occurred on the Methow River, the survey team counted the number and type of watercraft passing a shoreline location during a recreation survey day and during a time frame pre-selected according to the survey rotation of times and days.

A roving use survey was performed from May 24th through December 17th, 2005. Specific dates and type of day (i.e., week day, weekend day, or holiday) are provided in Tables 6.1-8 and 6.1-9. In total, spot counts conducted by boat took place over 29 days, beginning May 24th and ending December 13th. Data were not collected on three of the scheduled survey days due to poor weather conditions. In terms of the land-based surveys, data were collected 32 days beginning on May 24th and ending December 17th. Table 6.1-8 depicts the variation in type of day and number of days across the survey period.

Table 6.1-8 Summary of survey/spot count days.

Type of Day	Frequency	Percent
Boat Survey/Spot Counts		
Weekday	15	51.7
Weekend	10	34.5
Holiday	4	13.8
Total	29	100.0
Land Survey/Spot Counts		
Weekday	15	46.9
Weekend	13	40.6
Holiday	4	12.5
Total	32	100.0

[1] Section 4.3 of the Wells Recreation Visitor Use Assessment

Table 6.1-9 Survey dates by type of day.

Date	Day Type
5/21/2005	Weekend
5/24/2005	Weekday
5/26/2005	Weekday
5/29/2005	Holiday (Memorial Day WE)
6/04/2005	Weekend
6/09/2005	Weekday
6/15/2005	Weekday
6/24/2005	Weekday
6/26/2005	Weekend
7/02/2005	Holiday (4th of July WE)
7/09/2005	Weekend
7/12/2005	Weekday
7/16/2005	Holiday (Salmon Opening Day)
7/28/2005	Weekday
8/01/2005	Weekday
8/07/2005	Weekend
8/20/2005	Weekend
8/24/2005	Weekday
8/30/2005	Weekday
9/04/2005	Holiday (Labor Day WE)
9/09/2005	Weekday
9/18/2005	Weekend
9/24/2005	Weekend
9/28/2005	Weekday
10/02/2005	Weekend
10/10/2005	Weekday
10/16/2005	Weekend
10/28/2005	Weekday
11/05/2005	Weekend
11/15/2005	Weekday
11/26/2005	Weekend
12/13/2005	Weekday

[1] Appendix B.18 of the Wells Recreation Visitor Use Assessment

Activity Participation Data

For the sites surveyed at the Wells Project, the vehicle data were comprehensive; however, the spot count activity data were supplemented by the visitor survey data related to activity participation to provide a more complete picture of the types of activities that visitors participate in. As would be expected, the vehicle data showed holidays with the highest use followed by weekends at all six resource areas surveyed in the Wells Project area. The results of the demand surveys are detailed in Tables 6.1-10 through 6.1-13.

To estimate recreation use on the water surfaces of the reservoir, a survey team conducted a roving use survey whereby the surveyor counted on-water user information (i.e., number and types of boats and people) and land-based user information (i.e., number of people and types of activities).

Water-Based Recreation Use Patterns

Overall, visitation to the resource areas was highest on weekends and/or holidays and varied based on the type of activity (Table 6.1-10). The average number of people observed angling from boats or the shore was highest on weekends in all areas. In Brewster, there were few shoreline anglers on the weekends. Water skiers were observed more on holidays except at the Pateros/Wells areas, which had highest activity on weekends. The opposite was true for jet skiers, who were observed more on weekends, with the exception of the Pateros/Wells areas where they were more frequent during holidays.

There was very little, if any, participation in activities using non-motorized watercraft during the spot counts. Spot counts of non-motorized watercraft included sailboats primarily at the Okanogan/Bridgeport areas on holidays and at Brewster on weekdays. Holidays were better days to see picnickers except at Brewster where more were observed on weekends. Finally, campers were observed more on holidays than any other day for all of the resource areas.

Table 6.1-10 Recreation behavior of respondents to Wells Project survey area by resource area and type of day.

	Pateros/ Wells			Brewster			Okanogan/ Bridgeport		
Activity (mean #)	Weekday (n=15)	Weekend (n=11)	Holiday (n=3)	Weekday (n=15)	Weekend (n=11)	Holiday (n=3)	Weekday (n=15)	Weekend (n=11)	Holiday (n=3)
Reservoir Surface Recreation Use Data									
Fishing/ski boats (total)	1.1	4.5	8.7	2.5	7.7	4.7	3.5	30.6	7.7
Fishing boat									
Boat	0.3	1.8	1.7	2.2	6.7	2.3	3.0	29.6	4.0
People	0.4	3.6	3.0	4.2	18.2	3.0	5.4	89.6	6.7
Skiing									
Boat	0.9	2.6	7.0	0.3	1.0	2.3	0.5	1.0	3.7
People	1.3	8.6	3.7	0.3	3.4	4.3	0.5	2.2	6.0
Jet Skiing									
Jet skis	0.2	1.0	5.7	0.9	1.5	1.7	0	0.1	0
Skiers	0.1	1.5	2.0	0.5	1.2	0.7	0	0.2	0
Non-motorize watercraft	0.1	0	0	0.6	0.5	0.3	0	0.4	1.3
Sea kayaks	0	0	0	0	0.1	0	0	0.2	1.3
Sailboats	0	0	0	0.6	0.4	0.3	0	0	0
River kayaks	0.1	0	0	0	0	0	0	0.2	0
Canoes	0	0	0	0	0	0	0	0	0
Shoreline Recreation Use									
Anglers	0.3	2.2	1.7	0.1	0	0	1.6	3.5	0.3
Picnickers	0.1	1.6	2.3	0.7	1.1	0.5	0	1.4	5.3
Campers	0	0.1	0.3	0.6	1.2	1.5	0.5	0	0.3

[1] Section 6.2.1.1 of the Wells Recreation Visitor Use Assessment

Based on the observation data, participation in recreation activities was analyzed according to peak and non-peak seasons (Table 6.1-11). For the Brewster and Okanogan/Bridgeport areas, evidence of participation in recreation activities was highest during peak season. However, spot counts at the Pateros/Wells area demonstrated evidence of increased fishing, from boats and the shoreline, during the non-peak season. All other activities were spotted more during the peak season in this resource area.

Table 6.1-11 Recreation behavior of respondents to Wells Project survey area by resource area and season.

Activity (mean #)	Pateros/ Wells		Brewster		Okanogan/ Bridgeport	
	Peak Season (n=22)	Non-peak Season (n=7)	Peak Season (n=22)	Non-peak Season (n=7)	Peak Season (n=22)	Non-peak Season (n=7)
Fishing/ski boats (total)	3.5	2.3	6.0	0.7	18.2	1.9
Fishing boat						
Boat	0.6	2.3	5.0	0.7	16.8	1.9
People	1.0	4.7	12.1	1.1	43.7	17.7
Skiing						
Boat	2.9	0	1.0	0	1.3	0
People	5.7	0	2.5	0	2.2	0
Jet Skiing						
Jet skis	1.4	0	1.6	0	0.1	0
Skiers	1.1	0	1.0	0	0.1	0
Non-motorized watercraft	0.1	0	0.7	0	0.4	0
Sea kayaks	0	0	0.1	0	0.3	0
Sailboats	0	0	0.6	0	0	0
River kayaks	0.1	0	0	0	0.1	0
Canoes	0	0	0	0	0	0
Anglers	0.2	4.1	0.1	0	2.3	1.7
Picnickers	1.2	0	1.0	0	1.4	0
Campers	0.1	0	0.6	0	0.4	0

[1] Section 6.2.1.1 of the Wells Recreation Visitor Use Assessment

In addition to observation data, the visitors surveyed at each of the resource areas were asked what activities they participated in on the day of their visit. Based on the overall number of respondents in each activity by resource area, some of the most common water-based activities are summarized as follows:

1. Wells Overlook resource area: jet skiing, boating (motorized), swimming, and relaxing/camping;
2. Pateros resource area: relaxing/camping, boating, picnicking;
3. Methow River resource area: relaxing/camping, swimming;
4. Brewster resource area: fishing (boat), boating, relaxing/camping;
5. Bridgeport resource area: relaxing/camping, fishing (boat), fishing (shoreline);
6. Okanogan resource area: fishing (boat), boating, fishing (shoreline).

Visitors surveyed indicated that fishing was the most common primary reason for visiting all six resource areas. Within the Okanogan resource area, the highest percentage of respondents (62.5 percent) came specifically for fishing. As a water-based project, boating was also identified as a significant recreational activity at the Wells Project and adjoining recreation facilities. Fifty percent of all respondents visiting the Wells Project engaged in boating, of which 61 percent was from a fishing boat, followed by speed/sport boats (29 percent). These numbers demonstrate the importance of fishing and other water-based activities to recreationists at the Wells Project. Further analysis of boating activities revealed that visitors to Wells Overlook, Brewster, and Okanogan reported spending more time boating than respondents to the other areas within the Wells Project survey area. Among visitors who did participate in boating, they primarily used fishing boats or other boats such as speed or sporting boats. For a detailed summary of visitor activity participation at the Wells Project area, refer to the results in the Recreation Visitor Use Assessment, Section 5.1.3.2.

Land-Based Recreation Use Patterns

Spot counts were also completed from land and included similar recreation activity categories as the boat spot counts. Overall, results were similar to the boat spot counts where recreation participation was found to be highest on weekends and holidays (Table 6.1-12). Wells Overlook and Methow River resource areas showed the highest participation on weekends, while the Pateros and Okanogan areas had more visitors on holidays. At the Brewster and Bridgeport areas, there was more evidence of camping and water-related activities, such as boating and fishing, on holidays; however, there were more people sunbathing and having picnics on the weekends.

Table 6.1-12 Spot count summary of Wells Project survey area by resource area and type of day.

	Wells Overlook			Pateros			Methow River		
Count (mean #)	Weekday (n=45)	Weekend (n=42)	Holiday (n=9)	Weekday (n=45)	Weekend (n=42)	Holiday (n=9)	Weekday (n=45)	Weekend (n=42)	Holiday (n=9)
Vehicles (total)	1.8	2.7	1.4	3.5	4.1	8.8	0.4	1.0	0.7
w/o trailer	0.8	1.0	0.1	1.7	1.5	4.8	0.3	0.9	0.6
w/ trailer	0.8	1.4	1.1	0.3	1.0	2.1	0.1	0.1	0.1
w/ camper	0.1	0.3	0.2	1.5	1.6	1.9	0.1	0.1	0
Anglers	0	0.1	0	0.3	0.2	0.2	0	0.1	0.1
Sun bathers	0	0.1	0	0.2	0.5	2.6	0	0.1	0
Picnickers	0	0.6	0	0.9	0.6	1.9	0	0	0
Campers	0.1	0.1	0	0.8	0.1	1.3	0.1	0	0
Canoeists	0	0	0	0	0	0	0	0.1	0
Sea kayakers	0	0	0	0	0	0	0	0	0
River kayakers	0	0	0	0	0	0	0	0.1	0
Power boaters	0.1	0.1	0	0.1	0.2	1.3	0.1	0	0
Sailors	0	0	0	0	0	0	0	0	0
Wildlife viewers	0.1	0	0	0.3	0	0	0	0	0
	Brewster			**Bridgeport**			**Okanogan**		
Activity (mean #)	Weekday (n=45)	Weekend (n=42)	Holiday (n=9)	Weekday (n=45)	Weekend (n=42)	Holiday (n=9)	Weekday (n=45)	Weekend (n=42)	Holiday (n=9)
Vehicles (total)	3.5	7.5	7.4	5.0	7.5	10.5	0.8	2.5	2.9
w/o trailer	1.7	3.1	2.1	1.3	2.6	3.6	0.4	0.6	1.7

Table 6.1-12 Spot count summary of Wells Project survey area by resource area and type of day.

	Wells Overlook			Pateros			Methow River		
Count (mean #)	Weekday (n=45)	Weekend (n=42)	Holiday (n=9)	Weekday (n=45)	Weekend (n=42)	Holiday (n=9)	Weekday (n=45)	Weekend (n=42)	Holiday (n=9)
w/ trailer	0.8	2.7	3.1	1.3	1.9	2.0	0.2	0.6	0.9
Vehicles									
w/ camper	0.9	1.7	2.1	2.5	3.1	4.9	0	0	0
Anglers	0.1	0	1.0	0.1	0.4	1.4	0.3	0.1	1.9
Sun bathers	0.9	0.8	0	0.4	0.8	0.7	0	0	0
Picnickers	1.0	2.6	0.9	0.5	1.0	0	0	0	0
Campers	0.2	0.1	1.2	1.5	1.1	2.5	0	0	0
Canoeists	0	0	0	0	0	0	0	0	0
Sea kayakers	0	0	0	0	0	0	0	0	0
River kayakers	0	0	0	0	0	0	0	0.1	0
Power boaters	0.1	0	1.5	0.3	0	0.3	0.1	0.1	0.2
Sailors	0	0	0	0	0	0	0	0	0
Wildlife viewers	0.7	0	0	0	0	0	0	0	0

[1] Section 6.2.1.2 of the Wells Recreation Visitor Use Assessment

Using the land-based spot count data, resource areas were assessed again for recreation participation during peak and non-peak season (Table 6.1-13). Based on these counts, all six resource areas showed more evidence of higher participation rates in recreational activities during the peak season (May through September).

Visitors surveyed reported participating in a variety of land-based recreation activities. Picnicking was a common activity at the Brewster, Pateros, and Bridgeport resource areas. Relaxing/Camping was a frequent activity reported by respondents overall, with the greatest percentage occurring at the Pateros resource area (32.9 percent), followed by respondents from the Bridgeport area (30.2 percent). Visitors surveyed reported hiking as an activity at the Pateros and Bridgeport resource areas. The overall number of respondents engaged in biking activities was relatively low, with a total of 14 respondents. Those reporting biking were spread out over the Wells Overlook, Pateros, Brewster, and Bridgeport resource areas. Wildlife viewing was reported by 26 respondents in all resource areas with the exception of the Methow resource area. Horseback riding was only reported by a total of 4 respondents and only occurred within the Pateros and Bridgeport resource areas of the Project. For a detailed summary of visitor activity participation at the Wells Project area, refer to the results in the Recreation Visitor Use Assessment, Section 5.1.3.2.

Project Recreation Use Estimate

The visitor demand spot count observations were used as the baseline data for estimating the Wells Project's recreation use in Recreation Days at the Wells Project recreation areas. A Recreation Day (RD) is defined as each visit by a person to a development for recreation purposes during any portion of a 24-hour period, as defined in the *Glossary of FERC Form 80 Terms*. Annual, peak and off-peak season use estimates were developed by resource area. In order to determine use levels in the Wells Project survey area, data were analyzed based on several criteria: (1) if it were a weekday, weekend/holiday; (2) if it were peak or non-peak

season; and (3) by resource site. For the purpose of reporting results, the peak season was from May through September, 2005. The off-peak season was from January through April 2005 and October through December, 2005. The number of visitors was estimated based on the average number of vehicles counted at each of the resource sites for all six categories of day type (weekday, weekend, holiday) by season type (peak, non-peak) and included average lows and average highs. These averages were then multiplied by the average number of people per vehicle to obtain use estimates. Vehicles used to determine recreation use estimates included vehicles without boat trailers, vehicles with boat trailers, and RV campers.

Table 6.1-13 Spot count summary of Wells Project survey area by resource area and season.

	Wells Overlook		Pateros		Methow River	
Activity (mean #)	Peak Season (n=69)	Non-peak Season (n=27)	Peak Season (n=69)	Non-peak Season (n=27)	Peak Season (n=69)	Non-peak Season (n=27)
Vehicles (total)	2.5	1.2	5.0	2.6	0.8	0.3
w/o trailer	0.9	0.5	2.4	0.7	0.7	0.3
w/ trailer	1.3	0.7	0.9	0.4	0.1	0
w/ camper	0.3	0.1	1.6	1.4	0.1	0.1
Anglers	0.1	0	0.1	0.1	0.1	0.1
Sun bathers	0.1	0	0.8	0	0.1	0
Picnickers	0.4	0	1.2	0.1	0.9	0
Campers	0.1	0.1	0.8	0	0.1	0
Canoeists	0	0	0	0	0.1	0
Sea kayakers	0	0	0	0	0	0
River kayakers	0	0	0	0	0.1	0
Power boaters	0.1	0	0.3	0	0.1	0
Sailors	0	0	0	0	0	0
Wildlife viewers	0.1	0.1	0.2	0	0	0

	Brewster		Bridgeport		Okanogan	
Activity (mean #)	Peak Season (n=69)	Non-peak Season (n=27)	Peak Season (n=69)	Non-peak Season (n=27)	Peak Season (n=69)	Non-peak Season (n=27)
Vehicles (total)	7.7	0.7	8.5	2.2	1.3	0.3
w/o trailer	3.3	0.2	2.6	0.8	0.8	0.1
w/ trailer	2.5	0.3	2.1	0.4	0.6	0.2
w/ camper	1.9	0.2	3.8	1.0	0	0
Anglers	0.2	0	0.5	0	0.5	0
Sun bathers	1.1	0	0.9	0	0	0
Picnickers	2.4	0	1.0	0	0	0
Campers	0.4	0	2.0	0.1	0	0
Canoeists	0	0	0	0	0	0
Sea kayakers	0	0	0	0	0	0
River kayakers	0	0	0	0	0.1	0
Power boaters	0.2	0	0.2	0	0.1	0
Sailors	0	0	0	0	0	0
Wildlife viewers	0.5	0	0	0	0	0

[1] Section 6.2.1.2 of the Wells Recreation Visitor Use Assessment

Table 6.1-14 Annual use estimate summary for Wells Project in 2005.

Location	Annual Est.		Peak Season Est.		Shoulder Seasons Est.	
	Low	High	Low	High	Low	High
Carpenter Island Boat Launch	577.5	3129.1	577.5	2383.9	0.0	745.2
Wells Overlook	393.5	1787.2	393.5	967.6	0.0	819.6
Starr Boat Launch	368.2	1088.0	87.7	419.0	280.5	669.0
Pateros RV Park	1702.0	5791.8	1564.0	2663.1	138.0	3128.7
Pateros Memorial Park	2746.0	6774.8	1373.2	3431.6	1372.8	3343.2
Methow Fishing Access Lower	636.0	288.7	0.0	288.7	636.0	0.0
Methow Fishing Access Parking/Toilet	0.0	513.5	0.0	237.5	0.0	276.0
Methow Fishing Access Two Parking Areas	630.0	675.6	630.0	288.0	0.0	387.6
Methow Fishing Access Parking/Toilet South Side	160.0	1675.0	160.0	640.0	0.0	1035.0
Methow Fishing Access Rafting Take-out	927.0	828.3	927.0	828.3	0.0	0.0
City of Brewster Columbia Cove Park	3930.0	7294.2	3518.4	6462.6	411.6	831.6
Brewster Public RV Park	1774.5	3939.0	1774.5	3322.8	0.0	616.2
Informal Boat Launch	0.0	0.0	0.0	0.0		
Waterfront Trail	264.6	2382.5	0.0	371.0	0.0	0.0
Bridgeport Marina Park	4594.5	5864.0	4324.5	5750.0	264.6	2011.5
Wells Wildlife Area	0.0	198.0	0.0	0.0	270.0	114.0
Washburn Boat Launch	96.8	854.8	96.8	692.8		
Washburn Island Wildlife Unit	0.0	0.0	216.0	0.0	0.0	198.0
Fishing Access	147.0	765.0	147.0	661.5	0.0	162.0
Monse Boat Launch	3468.0	15087.1	94.5	513.7	0.0	132.3
Okanogan Dirt Boat Launch	0.0	40.0	0.0	12.0	0.0	103.5
Gravel Boat Launch	0.0	835.2	0.0	421.2		
Total (All Sites)	**19258.1**	**44928.7**	**15884.6**	**30355.3**	**3373.5**	**14573.4**

[1] Section 6.2.2 of the Wells Recreation Visitor Use Assessment

The use estimates by season for the Wells Project recreation resource areas ranged from 19,258 to 44,928 RDs with more than half of the visitation during the peak season ranging from 15,884 to 30,355 RDs (see Table 6.1-14 above).

The vast majority of the visitation occurred during the peak season, particularly at Bridgeport Marina Park which received nearly 4,324 to 5,750 RDs or nearly 30 percent of the Wells Project visitation. The City of Brewster Columbia Cove Park received the next highest visitation with 3,518 to 6,462 RDs during the peak season.

6.1.2.3 Summary of Interviews with the Local Community

Brewster

The Brewster Parent Group at Brewster High School was surveyed with respect to the Wells Project recreation facilities. Seventeen community members were asked to indicate the facilities that they used or visited. Approximately half of the individuals surveyed answered this question. The RV Campground was the most utilized facility, followed by the boat ramp, and then playground (Table 6.1-15). The wildlife area, fishing dock, trail, and Wells Overlook were among the least utilized Wells Project areas by community members of Brewster.

Table 6.1-15 Summary of Wells Project Facility use by Brewster HS Parent Group.

Project area	Used this Area	Did NOT use this Area	Missing
RV Campground	7 41%	2 12%	8 47%
Boat ramp	6 35%	3 18%	8 47%
Overlook	3 18%	6 35%	8 47%
Playground	5 29%	4 24%	8 47%
Trail	2 12%	7 41%	8 47%
Wells Dam overlook	4 24%	5 29%	8 47%
Fishing dock	3 18%	6 35%	8 47%
Wildlife area	2 12%	7 41%	8 47%
Other	0 0%	9 53%	8 47%

Brewster community members responded to nine questions that asked about various aspects of the Wells Project recreation facilities. Table 6.1-16 displays the frequency counts for each of these items. Overall, the majority of respondents did not think that visitor conflict or environmental controls were needed. Of the respondents, 35 percent thought that more services should be offered; 41 percent believed that additions, improvements, or changes should be made; and 51 percent indicated that the directional signs were adequate. The majority of participant responses suggest that visitors are pleased with the safety aspects of the area.

Table 6.1-16 Evaluation of Wells Project recreation facilities by Brewster HS Parent Group.

Survey Item #	Item Description	Yes	No	N/A	Missing
Q2	Controls are needed to prevent conflicts among recreationists	2 12%	13 77%	0 0%	2 12%
Q3	More controls are needed to prevent damage to the environment by visitors	4 24%	11 65%	0 0%	2 12%
Q4	Should there be more services offered	6 35%	9 53%	0 0%	2 12%
Q5	Are there any additions, improvements Or changes that you would like to see	7 41%	10 59%	0 0%	0 0%
Q6	Are the directional signs adequate	7 41%	7 41%	0 0%	3 18%
Q7	Are the enough edu/interp opportunities	6 35%	2 12%	6 35%	3 18%
Q8	Is there adequate access to information about the area	7 41%	4 24%	5 29%	1 6%
Q9	Are there locations that you avoid	1 6%	12 70%	0 0%	4 24%
Q10	Are there places where you feel unsafe	2 12%	11 65%	0 0%	4 24%

Two questions asked respondents to rate the acceptability of access and activities. Table 6.1-17 displays a summary of the responses. There was little difference between the responses to these two questions. While about half of the respondents found access to be “totally acceptable”, the other half reported that access was “Slightly unacceptable” or “Slightly acceptable.”

Table 6.1-17 Acceptability rating of access and activities by Brewster HS Parent Group.

Survey Item #	Item Description	Slightly Unacceptable	Slightly Acceptable	Totally Acceptable	Missing
Q12	Access quality for angling	2 12%	4 24%	6 35%	5 29%
Q13	Overall access quality for activities you enjoy	3 18%	5 29%	7 41%	2 12%

One question asked participants to select from a list of activities all the recreational activities that they enjoyed. Table 6.1-18 displays the frequency counts from that question. The most popular activity was swimming, followed by fishing.

Some of the survey questions asked Brewster High School Parent Group respondents to provide additional explanations for their responses. Few of the respondents offered explanations for their answers. Three individuals suggested that more control is needed to manage trash in the Wells Project area.

Table 6.1-18 Recreational activities of Brewster High School Parent Group.

Activity	Yes	No	Missing
Hiking	2	14	1
	12%	82%	6%
Biking	3	13	1
	18%	77%	6%
Fishing	6	10	1
	35%	59%	6%
Camping	4	12	1
	24%	71%	6%
Swimming	9	7	1
	53%	41%	6%
Paddling	1	15	1
	6%	88%	6%
Boating	2	14	1
	12%	82%	6%
Other	1	15	1
	6%	88%	6%

The following statements were the open-ended responses by participants to particular questions:

Do you have any comments regarding the recreation activities you enjoy at the Wells Project Recreation Area?
-More controls needed to prevent conflicts
-Motor boats and bird hunters dangerous to kayakers

Please rate the overall access quality for the activities you enjoy at the Wells Project Area (Level of Acceptability, 1-5). a. If you rated the above 'marginal' to 'totally unacceptable', please explain your answer and your suggestions for improvement.
-More controls need to prevent damage (trash) to the environment (4 comments identifying trash as an issue)

Are there certain activities or services that should be offered at the Wells Project Recreation Area that currently are not available?
-Camp areas
-More waterfront trails for walking

Are there any additions, improvements or changes that you would like to see at the Wells Project Recreation Area?
-Regular pesticide runoff testing in the water

Are the directional and information signs provided within the Wells Project Recreation Area adequate?
-Directional and information signs
-Need to be explained in Spanish

Are there any places on the Wells Reservoir/in the Wells Project area where you feel unsafe?
-Cassimer Bar Fishing Access (not frequented by many people)
-Brewster waterfront trail (Not well lit – hidden from observation of police officers)

Any Additional Comments?
-More tables are need and picnic shelters for the ones who make parties in the summer
-Also a Spanish speaking person to ease communication

Are there any other management issues such as crowding, facility needs, safety, etc?
-More surveillance in all recreational areas
-More security
-Additional security, additional lighting
-More facilities
-More security is needed for the families that are there during the day.
-More bathrooms
-Very few RV facilities
-Need more community education and public information
-Thank you for putting toilet at Cassimer Bar. The sign in Spanish there doesn't say the same thing as the English one.

In summary, respondents from the Brewster High School Parent group identified the RV Campground, boat ramp, and playground as the most utilized facilities by community members. While the majority did not identify environmental issues, approximately one-quarter of respondents commented on trash being an issue. Further, there is some indication that signage in Spanish may be desired by a few respondents. There were a few comments on including more safety/security measures and restroom facilities.

The City of Brewster RV Park Users Survey 2007

As part of developing information for the recreation plan, the city of Brewster conducted an RV Park Users Survey during the summer of 2007. Of the 68 respondents, the majority of respondents (83%) were from Eastern Washington, 73% of those were from the City of Brewster. Respondents were asked about the importance of specific improvements to facilities, such as additional RV spaces, upgraded bathroom facilities, improved lighting, etc. Further, the survey addressed the City of Brewster's ability to host more water and sports oriented events with additional RV sites and whether an improved RV park would be an economic benefit to the community. The survey results indicated strong support for improvement to facilities related to water-oriented recreation. Developing more RV spaces and adding lighting to City parks were also among the "most wanted" improvements.

Bridgeport

Surveys, which included the same questions as Douglas PUD's 2005 Recreation Use Survey, were conducted at the Bridgeport Fair (the surveys were distributed from a booth operated by Douglas PUD). Ten community members responded to this survey, which included questions about the facilities that they used or visited and their interpretation of needs. The playground was the most utilized facility, followed by the trail, and then the Wells Overlook and the Wells Dam overlook (Table 6.1-19). The wildlife area and fishing dock were the least utilized Wells Project areas by community members. Respondents were asked to rate the facilities that they

used from 1 – 10, but few individuals provided this information. Of the responses given, one participant rated the playground as '9', but all of the other ratings were 10.

Table 6.1-19 Summary of facility use – Bridgeport Fair.

Project area	Did NOT use this Area	Used this Area	Missing
RV Campground	7 70%	2 20%	1 10%
Boat ramp	7 70%	2 20%	1 10%
Overlook	6 60%	3 30%	1 10%
Playground	4 40%	5 50%	1 10%
Trail	5 50%	4 40%	1 10%
Wells Dam overlook	6 60%	3 30%	1 10%
Fishing dock	8 80%	1 10%	1 10%
Wildlife area	8 80%	1 10%	1 10%
Other	9 90%	0 0%	1 10%

Bridgeport community residents responded to nine questions that asked about various aspects of the Wells Project recreation facilities. Table 6.1-20 displays the frequency counts for each of these items.

Table 6.1-20 Evaluation of Wells Project recreation facilities – Bridgeport Fair.

Survey Item #	Item Description	No	Yes	N/A	Missing
Q7	Controls are needed to prevent conflicts among recreationists	8 80%	1 10%	0 0%	1 10%
Q8	More controls are needed to prevent damage to the environment by visitors	5 50%	3 30%	0 0%	2 20%
Q9	Should there be more services offered	6 60%	2 20%	0 0%	2 20%
Q10	Are there any additions, improvements Or changes that you would like to see	9 90%	1 10%	0 0%	0 0%
Q11	Are the directional signs adequate	1 10%	9 90%	0 0%	0 0%
Q12	Are the enough edu/interp opportunities	1 10%	4 40%	5 50%	0 0%
Q13	Is there adequate access to information about the area	2 20%	4 40%	2 20%	2 20%
Q14	Are there locations that you avoid	10 100%	0 0%	0 0%	0 0%
Q15	Are there places where you feel unsafe	10 100%	0 0%	0 0%	0 0%

Overall, the majority of respondents did not think that visitor conflict controls or environmental controls were needed. Only 20 percent of respondents thought that more services should be offered; 10 percent believed that additions, improvements, or changes should be made; and 90 percent indicated that the directional signs were adequate. Responses were mixed for two questions that asked about educational opportunities and the availability of information.

Participant responses suggest that visitors are pleased with the safety aspects of the Wells Project area.

Two questions asked respondents to rate the acceptability of access and activities. Table 6.1-21 displays a summary of the responses. There is little difference between the responses to these questions. The results indicate that the majority of respondents found access quality for angling and for the activities they enjoyed to be acceptable, with a majority find them "totally acceptable."

Table 6.1-21 Acceptability rating of access and activities – Bridgeport Fair.

Survey Item #	Item Description	Totally Unacceptable	Marginal	Slightly Acceptable	Totally Acceptable	Missing
Q12	Access quality for angling			2 20%	6 60%	2 20%
Q13	Overall access quality for activities you enjoy	1 10%	1 10%	2 20%	6 60%	

One question asked participants to select from a list of activities, all of the recreational activities that they enjoyed. Table 6.1-22 displays the frequency counts from that question. The most popular activity was swimming, followed by fishing.

Some of the survey questions asked respondents to provide additional explanations for their responses. Only a few of the respondents offered explanations for their answers. Two individuals suggested that more control is needed to manage trash in the Wells Project area. At least one respondent requested each of the following: water levels are unpredictable, more areas for hiking, better bathroom facilities, and more surveillance. Three respondents reported that they fish in the areas of Chief Joseph Dam, near the Okanogan River, and behind the dam.

Table 6.1-22 Recreational activities of Brewster Fair community respondents.

Activity	NO	YES
Hiking	7 70%	3 30%
Biking	9 90%	1 10%
Fishing	5 50%	5 50%
Camping	7 70%	3 30%
Swimming	4 40%	6 60%
Paddling	10 100%	0 0%
Boating	9 90%	1 10%
Other	9 90%	1 10%

Pateros

Survey forms were provided to the Pateros Parent Advisory Committee (PAC) Annual Meeting on April 28, 2008. The Pateros PAC conducts both a morning session and an evening session for their Annual Meeting. The PAC requested that due to their full agenda, they preferred a Mailback survey rather than asking participants to fill out the survey at the meeting. Mailback

surveys were handed out to both the morning and evening meetings to approximately 15 attendees. To date, no data has been received from the Pateros Mailback surveys.

Community surveys utilized for Brewster, Bridgeport, and Pateros are included in Appendix D.

6.1.2.4 Summary of Interview with Fish and Game Officer

The District 6 Fish Biologist from the Washington Department of Fish and Wildlife (Mr. Bob Jateff) responded to questions relative to his observations at the Wells fishing and boating access sites, and any other comments he felt were pertinent to understanding recreation use related issues. Following are all the comments made for the sites identified in the Well Project:

Columbia River Sites

Starr Boat Launch:
Salmon fishing access site from July 16th through August 31st. There is also the possibility of use during steelhead season (Oct-Mar), but that season is open by emergency rule only.

City of Pateros Memorial Park (Docks):
Salmon fishing access site from July 16th through August 31st. Possible access during steelhead season (Oct-Mar). The docks are very popular with steelhead anglers fishing from the shore.

City of Brewster Columbia Cove Park (Boat Launch):
Very popular boat launch site for salmon fishermen during July 1st through Oct 15th season. Bass and walleye anglers use this site April - Oct for launching boats.

Chicken Creek Boat Launch:
Not familiar with this site.

City of Bridgeport Marina Park (Boat Launch):
Popular with salmon anglers from July 1st through Oct 15th, also steelhead fishermen if there is a special season.

City of Pateros Methow Boat Launch:
Boat launching for salmon anglers during July 16th through August 31st season.

Methow Fishing Access 1 (South Side of River):
The lower Methow was historically a very popular steelhead fishing site but in recent years this site has been closed to all fishing unless opened by emergency rule (steelhead), so this site does not get much fishing use any more.

Methow Fishing Access 2 (North Side of River):
Same as south side of river site.

Riverside Drive Recreation Access (At Tennis Courts, North Side of River):
Not familiar with this site.

Okanogan River Sites

Cassimer Bar Fishing Access:
Not familiar with this site.
Okanogan River Informal Boat Launch 1:
Used for boat launching during salmon season as well as April - Oct for bass fishing.

Monse Boat Launch:
Boat launch site for bass anglers during April through Oct Okanogan

Okanogan River Informal Boat Launch 2:
Bass anglers use this site for launching April - Oct.

6.1.2.5 Summary of Research on Hispanic Recreation Needs

DTA was asked to provide background information on current recreation needs for Hispanic populations. For a more thorough review of existing information, refer to Appendix A for the literature review on this topic. In general, a review of the literature indicates that Hispanic community members are looking for recreation opportunities that allow for larger group activities in a natural setting that provide modest levels of facility development.

Hispanics primarily recreate with larger family groups and place high value on the social qualities of participating in outdoor recreation (Chavez, 2000; Gobster, 2002; Shaull & Gramann, 1998; Virden & Walker, 1999). As a result, managers should provide opportunities that accommodate larger groups such as providing tables with additional seating, simple permit systems for organized group events, and safe clean access to restrooms (Gobster, 2002).

Water-based activities, such as swimming, are highly important to Hispanics and most indicate they concentrate their activities near lakeshores and alongside creeks during trips to parks and forests (Gobster, 2002; Sasidharan, Willits, & Godbey, 2005). Because food is symbolic to Hispanic culture, picnicking is often engaged in when visiting parks, forests, and recreational areas (Sasidharan, Willits, & Godbey, 2005). Therefore, Hispanics are more likely to use outdoor cooking facilities such as picnic tables, pavilions, and grills (Gobster, 2002; Sasidharan, Willits, & Godbey, 2005). Because Hispanics participate in a wide variety of activities, managers should focus more opportunities to hike, camp, picnic, and participate in recreation near bodies of water (Sasidharan, Willits, & Godbey, 2005).

Although Hispanics prefer to recreate in natural settings, there are expectations for some level of facility development (Gramann, 1996; Virden & Walker, 1999). For example, they prefer locations with restrooms, camping space at each site, picnic tables, signs, trails, parking spaces, water, and fire rings (Bass, Ewert, & Chavez, 1993; Irwin, Gartner, & Phelps, 1990). Providing Hispanics with recreation information is often difficult due to potential language barriers (Thapa, Graefe, & Absher, 2002). In addition, Hispanics prefer to obtain information from family or

friends and are less likely to approach park rangers and managers about recreation opportunities (Thapa, Graefe, & Absher, 2002). As a result, when obtaining information from a park or forest directly, Hispanics prefer print media such as maps and brochures (Thapa, Graefe, & Absher, 2002).

An important constraint to recreation participation is regulating access through visitor fees. Research has shown that Hispanics are more sensitive to fees and may be priced out of the recreation market (Bowker & Leeworthy, 1998). Therefore, potential measures may include reducing the use of recreation fees or identify thresholds where fees might become a constraint to participation.

6.1.3 Potential Recreation Activities with High Unmet Demand within the Wells Project Area

Based on the review of unmet demand information derived from the Washington SCORP, the 2005 Recreation Use Assessment, Wells Project monitoring data, Interagency Committee for Outdoor Recreation's (IAC) statewide outdoor recreation participation survey, and the summary of community interviews and visitor surveys, potential activities with high unmet demand at the Wells Project were identified.

Before analyzing potential activities with high unmet demand in the Wells Project area, it is important to note the activities that the Washington SCORP identified with high demand in the state that are provided within the Wells Project. The Wells Project resources provide opportunities for 11 of the top 15 activities in Washington with high demand (Table 6.1-23). These 11 activities are shaded in the table below of the SCORP's top 15 activities with high demand.

Table 6.1-23 Washington's recreation activities with high latent demand with activities available at the Wells Project area (shaded).

Rank	Activity	Rank	Activity	Rank	Activity
1	Walking/hiking	6	Indoor	11	Camping
2	Outdoor team/ individual sports	7	Picnicking	12	0ff-road vehicles
3	Nature activities	8	Water activities	13	Hunting/shooting
4	Sightseeing	9	Snow/ice activities	14	Equestrian activities
5	Bicycle riding	10	Fishing	15	Air activities

Based on the information gathered in the visitor surveys, there are no potential activities with high unmet demand within the Wells Project area. However, water-related recreational activities have specific constraints; and participation in these activities is potentially prevented primarily due to the condition of facilities. For example, respondents reported lower satisfaction with a boat ramp on the Okanogan River. More specifically, they indicated that the ramp was not steep enough and the surrounding water was too shallow to adequately launch their boats, particularly at lower water levels. Respondents suggested dredging the areas surrounding the launch ramp to enhance launching at lower water levels.

Potential measures to address high fishing demand include evaluation of enhancing the overall fishing experience by improving access, as described above, as well as locating fish cleaning

stations at high use access areas such as City of Pateros Memorial Park (Methow Launch), City of Brewster Columbia Cove, and City of Bridgeport Marina Park.

6.2 Assess Future Recreation Demand

This element of the study projected future recreation use at the Wells Project over the estimated period of the new license (30 to 50 years). Obviously, projecting the future is a speculative activity, especially over a 30-to-50-year period. However, these projections can be useful for general planning purposes to identify potential management issues that may occur in the future. This approach included reviewing existing recreation use trends, projections of existing population and recreation activity participation, an evaluation of reasonably foreseeable events that may influence future use, and estimating future recreation use over the license period.

6.2.1 Review of Existing Recreation Use Trends

Trends of actual Wells Project recreation use were reviewed from Project monitoring reports for Wells Reservoir, Interagency Committee for Outdoor Recreation's (IAC) statewide outdoor recreation participation survey, WDFW fishermen survey, Washington fishing license sales, ORV green stickers and boating vessel registrations for the counties where the majority of Project visitors originate from, local fishing guide activity, and recreation equipment sales. Each of these indicators provides insight into the recreation trends for three of the primary recreation activities in the Wells Project area.

6.2.1.1 Washington Department of Fish and Wildlife Fishermen Survey

Washington State offers many outlets for anglers. In fact, there are over one million acres of freshwater within the state. Unfortunately, there is little information available regarding angler activity that is specific to the Wells Reservoir. In the absence of site-specific information, the following information regarding the freshwater anglers was taken from a 2002 telephone survey of resident freshwater anglers within Washington State. The sample consisted of freshwater license holders for the license year of April 1, 2002 – March 31, 2003 (Michael, 2004).

Over 1,500 anglers participated in the survey inquiring about angling activities, preferences, and satisfaction. Fishing is maintaining its appeal as an important outdoor activity in the state and 75 percent of anglers reported that their fishing activity had increased or remained stable. Of the respondents, 55 percent rated the overall quality of fishing in the state as excellent or good and another 30 percent rated it as fair, and 83 percent indicated that they were generally satisfied with their fishing experiences. The top two reasons given for going fishing were “for relaxation” (24 percent) and “to be with family and friends” (23 percent), followed by “for the sport” (18 percent) and “for the fun of catching fish” (16 percent) (Michael, 2004).

There are over 75 species of freshwater fish in Washington State. The most popular species pursued by anglers was the Rainbow Trout. Figure 6.2-1 displays popularity of and variety of fish species (Michael, 2004).

The most popular fishing areas were lowland trout lakes. Figure 6.2-2 displays fishing preference by type of fishing (Michael, 2004).

The WDFW works to maintain the health and population of fish species throughout the state. As part of the original license for Wells Dam, Douglas PUD releases summer/fall Chinook into the Columbia River at Wells Dam and summer steelhead into the Methow and Okanogan rivers, in exchange for the loss of Chinook spawning habitat related to the construction of the Wells hydropower facilities. In addition, the Wells Habitat Conservation Plan required Douglas PUD to enhance populations of spring and summer/fall Chinook, coho, sockeye and steelhead above Wells Dam as mitigation for losses incurred to fish passing through the dam (Douglas County PUD, 2002).

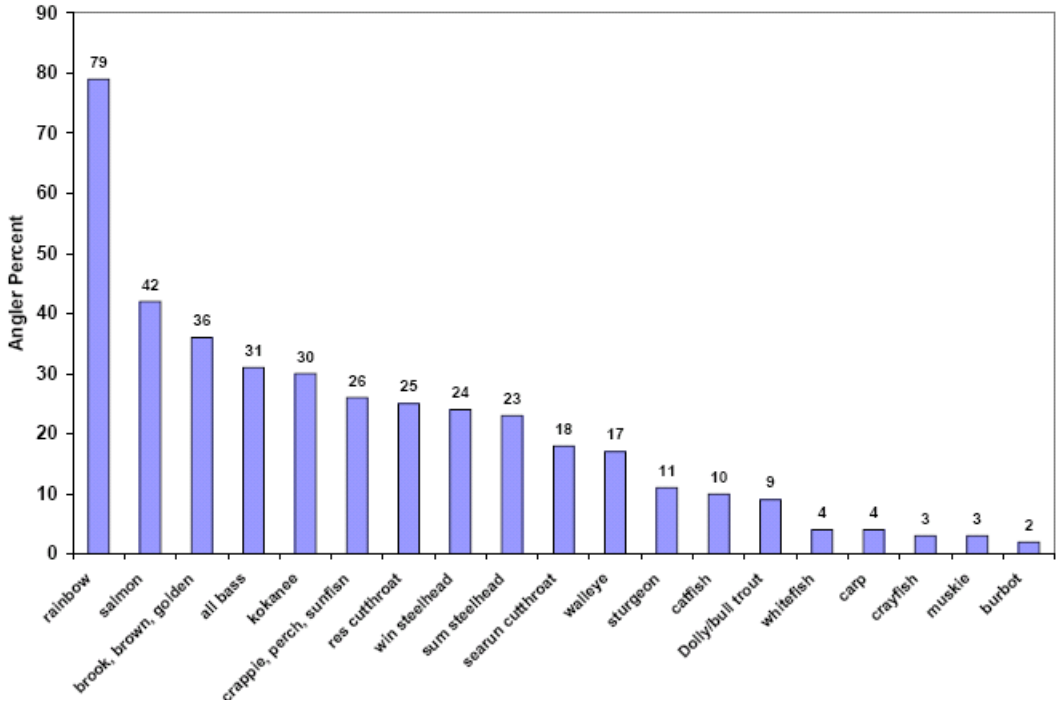

Figure 6.2-1 Popularity of fish species among Washington anglers (Michael, 2004).

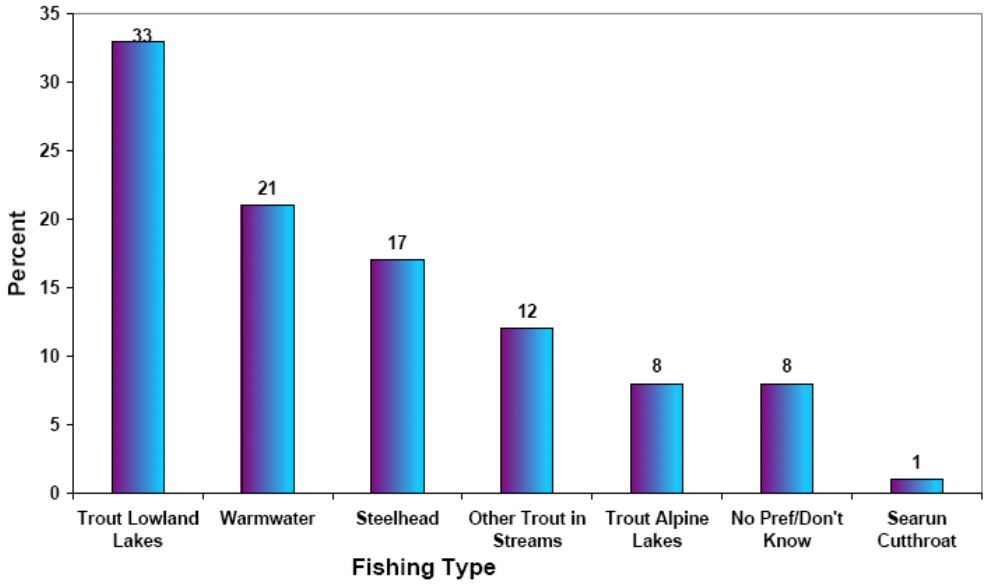

Figure 6.2-2 Recreational freshwater fishing preferences of Washington anglers (Michael, 2004).

It is clear that recreational freshwater anglers reported that trout and steelhead are popular species. This is true for the Wells and Chief Joe tailraces where, in 2003, there were an estimated 52,000 fishing trips for steelhead trout and 4,500 fishing trips for Chinook salmon. The estimated gross expenditure for trout fishing was $25 per fishing trip in 1996; and in 2002, this estimate was about $35. In contrast, salmon anglers spend more money per trip than trout anglers and one estimate places their spending at ~$75 per trip (Bartlett, n.d.).

6.2.1.2 Washington Fishing License Sales

The number of fishing licenses purchased by residents in the area is an indicator of fishing activity. The number of fishing licenses sold statewide has risen for three straight years and achieved the highest number (810,433) of licenses sold to Washington residents in 2007.

According to the WDFW, fishing license sales have remained relatively stable. Figure 6.2-3displays the number of fishing licenses sold in the tri-county area (Personal communication with Justin McCarron, November 27, 2007). Overall, Chelan County showed the highest number of fishing licenses sold, followed by Douglas and Okanogan Counties.

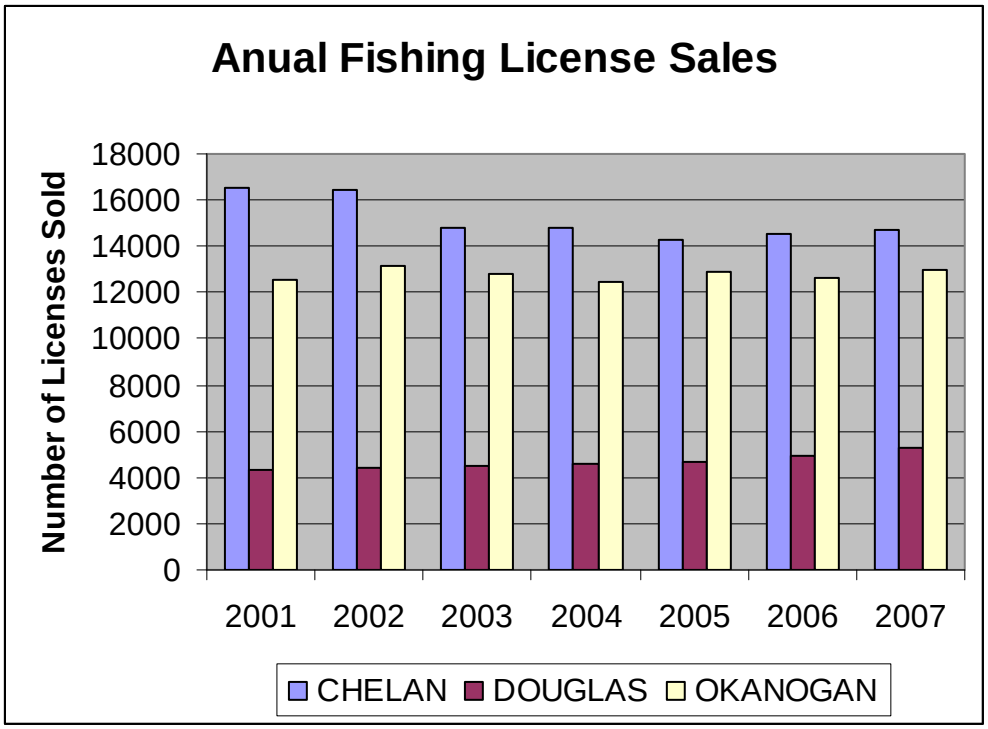

Figure 6.2-3 Washington fishing license sales in the Wells Project area (2001 to 2007).

Although fishing licenses contribute to the state's economy, the sale of fishing-related equipment and travel expenses are also important contributors. The Outdoor Industry Foundation (OIF) calculated these projected contributions as detailed in Table 6.2-1 (Southwick Associates, Inc., 2007).

6.2.1.3 Washington Fishing Guide Activity

Washington State requires private fishing guides to maintain guiding licenses and records which are available dating back to 2000. Figure 6.2-4 displays the number of fishing guide licenses sold for the past eight years (Personal communication with Carol Turcotte, November 28, 2007):

Table 6.2-1 Contributions of fishing to Washington State's economy.

	Retail sales	Total multiplier effect*	Salaries and wages	Jobs	Sales and motor fuel tax	Federal income taxes
All travel and equipment	$1,009,395,369	$1,793,281,547	$451,598,151	17,282	$72,731,524	$75,366,931
Travel, eq., & real estate	$557,844,380	$991,060,653	$249,576,626	9,551	$40,195,223	$41,651,686
Equipment	$187,215,666	$332,605,449	$83,759,299	3,205	$13,489,740	$13,978,537
Travel expenses	$370,628,714	$658,455,204	$165,817,327	6,346	$26,705,483	$27,673,149

* The multiplier effect is an estimate of the overall effect of fishing on the state's economy.

There are no data available to indicate the exact areas in which these guides operate and according to WDFW officials, fishing guides may operate in any county, regardless of their

county of residents. However, there are presently 10 outfitters operating within Okanogan, Chelan, and Douglas Counties that offer some type of guided fishing trips. Of these 10 outfitters, 6 focused primarily on guided fishing trips and 4 offers guided fishing experiences as one service among several other services.

In addition to these fishing guide outfitters, 9 outfitters provide a variety of outdoor experiences in the immediate area. Examples of these outdoor experiences include lake tours, hiking, hunting, balloon rides, horseback riding, and the like. Based on an internet search, there are another 9 outfitters operating within this tri-county area providing whitewater rafting experiences.

To give some indication of guiding activities overall with the state of Washington, Figure 6.2-4 summarizes how many guide licenses were sold in the state of Washington from 2000-2007.

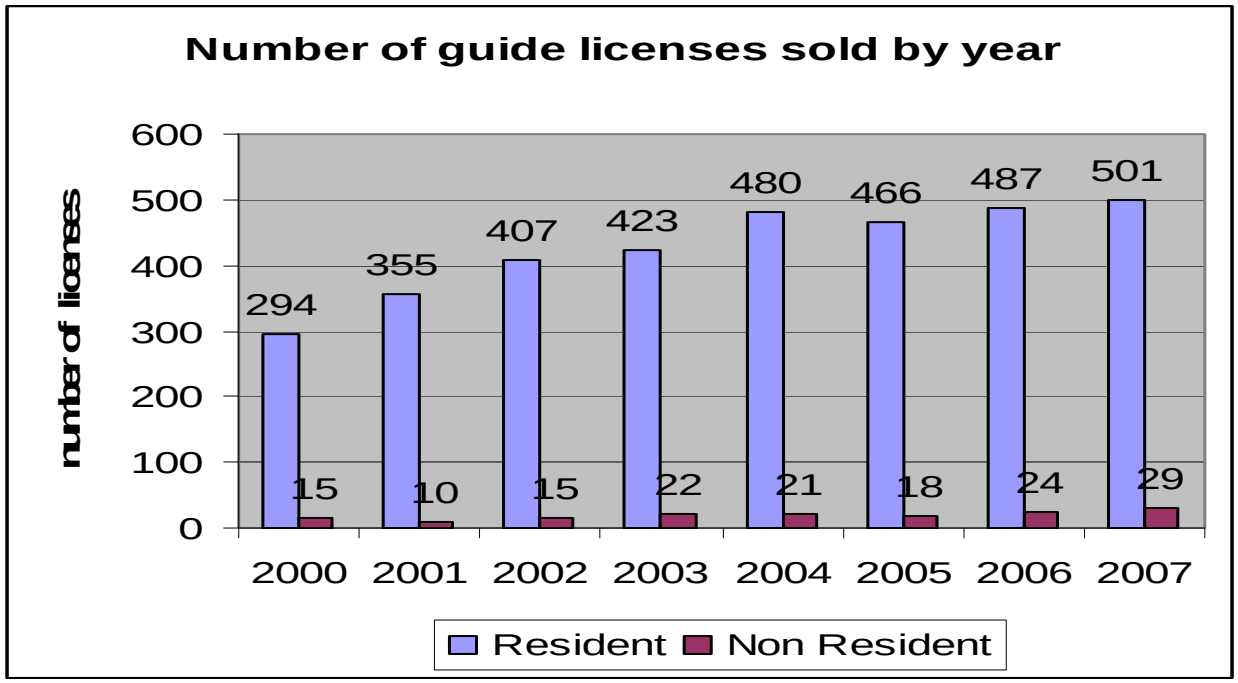

Figure 6.2-4 State of Washington fishing guide licenses sold (2000 to 2007).

6.2.1.4 Washington Boating Vessel Registrations

Washington resident boating vessel registrations for counties in the Wells Project vicinity since 1999 (Table 6.2-2) were also obtained. Overall, vessel registrations have remained relatively stable in the Wells Project vicinity over the past 10 years with the highest number of boating vessel registrations occurring in Chelan County.

Table 6.2-2 Vessel registration in Washington State.

	Fiscal Year (July - June)								
Counties	1999	2000	2001	2002	2003	2004	2005	2006	2007
Douglas	1,875	1,901	1,881	1,948	1,954	1,976	1,989	2,030	2,039
Okanogan	1,613	1,648	1,684	1,707	1,787	1,798	1,794	1,828	1,923
Chelan	4,333	4,315	4,358	4,408	4,491	4,533	4,617	4,636	4,766

Source: DOL Vessel Registration System - Vessel Registration Count by Moorage County and Length

Data on retail boat sales were available from the Washington Department of Licensing and Washington Sea Grant Program from July 2007 to June 2008. Based on these data, boating sales decreased 7.7% during that year (Table 6.2-3).

Table 6.2-3 Retail boat sales in Washington July 2007 to June 2008.

Year	Units	$	% Change
2007	4174	166,728,123	
2008	3716	153,814,963	-7.7%

Based on data from the Washington Department of Licensing, overall recreation vehicle registrations increased 58.4% from 1980 to 2006. The largest increase occurred between 2000 and 2006 (+27.5%). Off-road vehicle and snowmobile registrations represented the greatest growth compared to all other types of recreational vehicles (Table 6.2-4).

Table 6.2-4 Registered recreation vehicles in Washington.

Year	Travel Trailers	Campers	Motor Homes	Motorcycles	Mopeds	ORV's	Snowmobiles	Total	%Change
1980	97,659	58,630	30,952	135,777	4,175	13,058	14,194	354,445	
1990	86,647	49,195	57,973	103,301	15,293	36,462	20,793	369,664	+4.3%
2000	95,447	37,695	85,850	114,624	7,713	61,308	37,703	440,340	+19.1%
2006	114,949	31,174	75,660	189,596	8,862	104,956	36,122	561,319	+27.5%
								Total % Change	+58.4%

6.2.1.5 Great Washington State Birding Trail

The Cascade Loop of The Great Washington State Birding Trail - Cascade Loop, features 225 of Washington's 365 bird species, includes both Cassimer Bar and Bridgeport Bar as destination birding locations. The best estimate of use on this section of the birding trail can be assessed by the number of maps/brochures distributed for the entire Cascade Loop Birding Trail. Since the trail was completed in 2002, 64,500 Cascade Loop maps have been distributed (Christi Norman, personal communication, 2007). The third printing will occur in 2008 and the Washington State Audubon Society is also planning a user survey of the 6,000+ who purchased the brochure online. While it is certain that not all of those receiving maps have visited the Wells Project, map distribution can serve as an index for level of use by a difficult-to-measure recreation constituency.

6.2.1.6 Recreation Equipment Sales Trends

Overall, active outdoor recreation in Washington State contributes over $11.7 billion to the state's yearly economy, supports 115,000 jobs, generates $650 million in annual state tax revenue, and produces $8.5 billion annually in retail sales and services (3.5 percent of the gross state product) (Southwick Associates, Inc., 2007).

A 2006 report published by OIF divided the nation into nine regions and reported the economic impact of human powered outdoor recreation on these regional economies. Categories of human powered outdoor recreation that are included in these estimates are: biking, camping, fishing, hunting, paddle sports, snow sports, trail sports, and wildlife viewing. Washington State was placed in the Pacific region along with Alaska, California, Hawaii, and Oregon. The total contributions to the economy of this five state region was $81,696 million, generated 762,247 jobs, and sold $5,036 million of outdoor gear retail sales. The amount of general sales associated with outdoor trips was $46,081 million and the combined federal and state tax revenue association with outdoor recreation was $9,369 million (Outdoor Industry Foundation, 2006).

OIF produced a document titled "State-level Economic Contributions of Active Outdoor Recreation" that placed a dollar value on five common categories of human powered activities. Four of those categories include activities that occur in the Wells Reservoir area. Table 6.2-5 displays yearly expenditures related to both travel associated with the activities and equipment sales for the state of Washington (Southwick Associates, Inc., 2007).

Table 6.2-5 Yearly expenditures for selected recreation activities in Washington State.

Activity	Travel Related	Equipment Sales
Camping	$3,318,209,374	$263,978,132
Bike	$1,565,017,162	$177,342,754
Trail	$861,462,217	$147,987,895
Paddle sports	$88,175,746	$65,818,827
Total	$6,419,092,151	$765,616,121

Table 6.2-6 summarizes the total contributions of human powered outdoor recreation activities to the state's economy (Southwick Associates, Inc., 2007). Overall, total retail sales generated over seven billion dollars in Washington in 2006.

Table 6.2-6 Contributions of human-powered recreation activities in Washington State.

Total retail sales	Total multiplier effect	Salaries and wages	Jobs	State tax revenue	Federal income taxes
$7,184,708,272	$9,362,291,187	$4,568,642,736	90,309	$565,929,271	$564,261,013

*Total retail sales = trip-related + Equipment & accessories sales

6.2.2 Estimate of Future Recreation Use over the License Period

Based on historical trends, future growth projections, and likely foreseeable actions in the watershed, professional judgment was used to estimate recreation use and facility utilization over the expected term of the new license (i.e., 30 to 50 years). These estimates must be considered very speculative and only provide a general indication of how recreation use is expected to change over the license period. The following steps were utilized to estimate recreation activity for the Okanogan, Douglas and Chelan County populations (16 years and older):

a. The calculations of participation estimates were based on the projection indices created from Bowker et al., (1999), who utilized the National Survey on Recreation and the Environment (NSRE) descriptive findings for populations 16 years and older, not institutionalized (Cordell et al.1999) to develop participation by millions 2000-2050 on ten year increments.

b. The county projections are presented in a range derived from national and regional participation projection estimates. These are calculated based on the indices created for the nation and region, utilizing the same rate of increase index created by Bowker et al. (1999). To obtain the county level estimated activity participation rates, the following individuals were contacted and steps applied:

    1. By county, the indexes from national and regional participation rates were multiplied by the base number of participants (represented in millions), then divided by the base population used in national and regional calculations (Bowker et al., 1999, pp. 323-349). This yielded a national and regional participation rate for each activity by decade.

    2. Next, the national and regional participation rates were multiplied by the estimated Okanogan, Douglas and Chelan County populations of individuals non-institutionalized and over the age of 16, consistent with the estimate parameters developed by Bowker et al. (1999). The population estimates came from the Washington Office of Financial Management, subtracting estimates of institutionalized individuals from the Department of Corrections.

6.2.2.1 Future Project Use Estimates

The combined populations of Okanogan, King, Chelan, Snohomish, Douglas and Whatcom, Spokane counties are expected to grow by approximately 63 percent by 2050, and roughly 10 percent by decade. Thus, the county populations are likely the predominant factor that will drive the overall Wells Project recreation use into the future. In 2005 Recreation Visitor Use Survey, the Wells Project use estimate ranged from 19,258 Recreation Days (RDs) to a high of 44,929 RDs. While several factors will influence future use, the future Wells Project use "guesstimate" by 2050 would range from 29,272 RDs to as much as 68,292 RDs (see Table 6.2-7 below).

Table 6.2-7 Future Project use projections (range) based on the growth rate of Okanogan, King, Chelan, Snohomish, Douglas and Whatcom, Spokane Counties combined, 2010-2050.

Project Use Projections	2005	2010	2020	2030	2040[1]	2050[1]
Combined County Growth Rate (Weighted)[2]	--	1.08	1.21	1.31	1.46	1.63
Low Use Estimate	19,258	20,876	23,230	25,173	28,124	31,420
High Use Estimate	44,929	48,703	54,195	58,728	65,612	73,304

[1] Population participation levels are estimated for 2040 and 2050 since the State of Washington does not have population data projected beyond 2030. Thus, Licensee estimated the county population projections for 2040 and 2050 by averaging the population growth over the previous decades where the State of Washington developed projections.
[2] Weighted combined county growth rate based on percentage of visitors surveyed

6.2.2.2 Participation Trends of the Wells Project's Primary Recreation Activities

The overall Project use estimate over the term of the new license will likely be driven by the population growth of Okanogan, King, Chelan, Snohomish, Douglas, Whatcom and Spokane Counties combined, which account for 75 percent of the overall use estimates. It is important to examine what the specific activities are that may shift the types of recreation uses within the overall Wells Project use area. Utilizing the results of the Recreation Visitor Use Assessment conducted in 2005, the top two primary reasons for visiting the Wells Reservoir are fishing (31 percent) and water skiing/wakeboarding (9 percent). After the top two reasons, the percentage of visitors surveyed was 6 percent or less; and, the next three consequential primary reasons for visiting Wells Reservoir were not activity specific, but rather (a) to have fun/relax, (b) stop en route to another destination, and (c) living nearby. Thus, fishing and water skiing/wakeboarding will be the key activities examined for trends within overall use over the next likely term of the license (through 2050). Motorboating will be used as the activity in place of water skiing / wakeboarding since Cordell's Projections of Outdoor Recreation Participation to 2050 (which these projections are based on) does not specifically break out water skiing/wakeboarding but rather lumps them into the larger category of motor-boating.

By the year 2050, the average percent of the population who will participate in fishing will increase by seven percent to 36 percent of the population. Motorboating (including water skiing and wakeboarding) is also expected to increase in popularity by 12 percent over the same term. These projections are based on Cordell's work which was completed in 2005 prior to the rising costs of fuel. As a result, gas prices are likely to affect participation in motorized water recreation causing the expected increase in these activities to be less than anticipated. Despite a lower growth rate through 2050 than motor-boating activities, fishing will likely be the primary driver for growth in recreation activity at Wells Reservoir as it was clearly the most popular reason for visiting the reservoir at nearly one-third of visitors surveyed in 2005. The motorboating activities of water skiing and wakeboarding accounted for less than 10 percent of the visitors surveyed in 2005; however, increases in these types of motorized water-based activities bear close examination due to their higher level of visibility, noise dispersion and impact on perceived crowding at reservoirs, especially in comparison to fishing. As a result, increases in high-powered motorized boating related activities (especially water skiing and wakeboarding) would likely have greater effects on physical capacity and social capacity as use

increases over the term of the new license. Table 6.2-8 illustrates recreation activity trends based on the counties most frequenting the Wells Project. It should be noted that forecasting participation trends is highly speculative, as future changes in the economy, fishing regulations, or other unanticipated factors are difficult to predict.

Table 6.2-8 Estimated activity participation projections of Wells Project activities.

Selected Activities	2005			2010			2020		
Canoeing	140,348	to	85,724	150,143	to	91,706	174,761	to	107,702
Motorboating	480,823	to	453,769	514,379	to	485,437	612,931	to	574,134
Non-pool Swimming	806,182	to	814,965	862,445	to	871,841	1,018,509	to	1,033,109
Rafting/Floating	0	to	77,931	0	to	83,369	0	to	94,239
Visit Beach or Waterside	1,318,507	to	1,478,733	1,410,524	to	1,581,933	1,662,534	to	1,900,731
Fishing	581,660	to	495,922	622,253	to	530,532	730,118	to	621,357
Hunting	159,426	to	85,310	170,552	to	91,264	182,424	to	92,720
Non-Consumptive Wildlife	1,247,650	to	1,212,707	1,334,723	to	1,297,340	1,622,516	to	1,579,558
Hiking	497,818	to	791,527	532,560	to	846,767	633,668	to	1,008,393
Horseback Riding	147,611	to	167,197	157,912	to	178,865	189,570	to	213,747
Primitive Camping	260,641	to	373,595	278,831	to	399,667	313,848	to	475,545
Developed Camping	428,381	to	618,249	458,277	to	661,396	532,260	to	801,965
Biking	608,378	to	688,505	650,837	to	736,555	791,864	to	872,799
Family Gathering	1,300,737	to	1,367,328	1,391,514	to	1,462,752	1,654,516	to	1,732,205
Picnicking	1,032,815	to	1,119,367	1,104,894	to	1,197,486	1,324,317	to	1,428,983
Sightseeing	1,233,273	to	1,376,184	1,319,342	to	1,472,226	1,613,301	to	1,813,672
Walking	1,380,109	to	1,532,222	1,476,426	to	1,639,154	1,743,594	to	1,952,027
Selected Activities	**2030**			**2040[1]**			**2050[1]**		
Canoeing	201,630	to	133,857	241,616	to	167,376	296,325	to	209,127
Motorboating	710,041	to	707,405	859,887	to	878,724	1,048,638	to	1,092,105
Non-pool Swimming	1,197,889	to	1,225,401	1,459,063	to	1,503,082	1,776,250	to	1,839,723
Rafting/Floating	0	to	117,901	0	to	149,920	0	to	190,731
Visit Beach or Waterside	1,979,764	to	2,232,581	2,388,150	to	2,750,561	2,882,984	to	3,282,955
Fishing	821,292	to	681,476	962,328	to	804,692	1,133,479	to	954,347
Hunting	190,905	to	91,676	210,887	to	94,005	238,286	to	100,322
Non-Consumptive Wildlife	1,897,597	to	1,875,185	2,270,402	to	2,301,749	2,704,536	to	2,725,560
Hiking	738,664	to	1,231,975	892,999	to	1,520,331	1,080,248	to	1,859,364
Horseback Riding	222,630	to	258,850	274,522	to	318,906	341,696	to	391,697
Primitive Camping	339,048	to	525,383	386,008	to	508,400	443,350	to	743,561
Developed Camping	622,165	to	942,616	743,221	to	1,154,795	890,083	to	1,403,766
Biking	933,351	to	1,020,773	1,138,905	to	1,237,493	1,404,614	to	1,490,995
Family Gathering	1,941,662	to	2,024,556	2,328,780	to	2,453,031	2,797,798	to	2,936,347
Picnicking	1,553,060	to	1,680,752	1,836,439	to	2,008,181	2,179,065	to	2,374,711
Sightseeing	1,922,403	to	2,159,299	2,323,086	to	2,656,722	2,791,292	to	3,189,917
Walking	2,004,420	to	2,322,484	2,394,425	to	2,821,126	2,809,832	to	3,365,849

[1] Population participation levels are estimated for 2040 and 2050 since the State of Washington does not have population data projected beyond 2030. Thus, Licensee estimated the county population projections for 2040 and 2050 by averaging the population growth over the previous decades where the State of Washington developed projections.

6.2.3 Reasonably Foreseeable Events that may Influence Future Use: The Greater Columbia River Water Trail

A portion of the Greater Columbia Water Trail (GWCT) runs through the Wells Project area and should therefore be considered when evaluating Project-related recreation opportunities. The GWCT is a 500+ mile trail network in the Columbia River watershed from the Canadian border through the Hanford Reach. The water trail includes approximately 400 miles of the Columbia River, 82 miles of the Okanogan River, and 18 miles of the Similkameen River (Figure 6.2-5). The water trail offers a variety of diverse features including geologic formations, scenery and wildlife viewing opportunities, sand beaches, and historic sites. In addition, communities along the trail offer visitor services including dining, lodging, and cultural opportunities (www.gcwt.org).

A coalition of state, federal, county, and local jurisdictions as well as businesses and paddling enthusiasts was established with a mission to enhance recreation and an appreciation for the Columbia River watershed's natural and cultural resources by developing water trails for flatwater paddle sports.

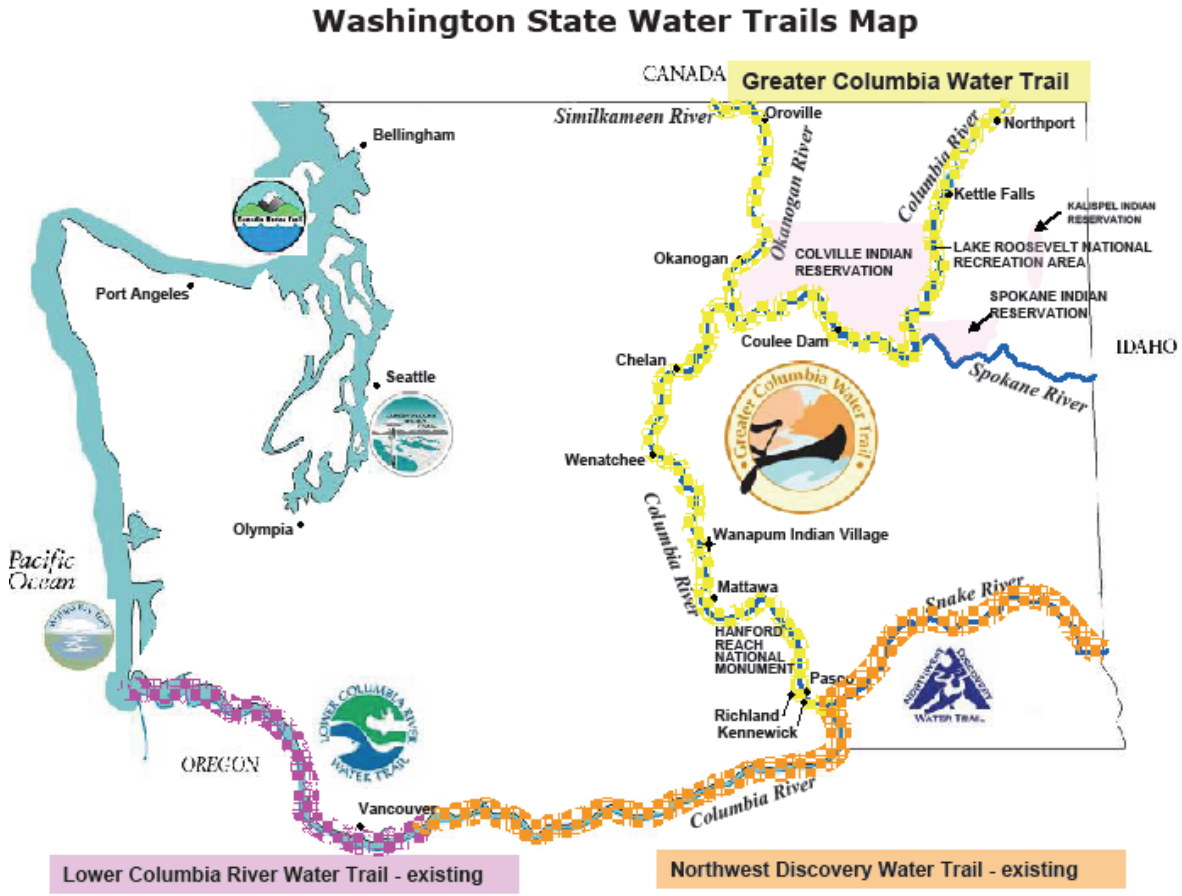

Figure 6.2-5 Washington State water trails map.

The coalition is working in conjunction with the National Park Service and local communities to identify and mark public launch and landing sites and public access areas (www.gcwt.org). To accomplish these tasks, the GWCT Coalition has developed a series of guidelines for the development of the water trail. The following guidelines are minimum standards recommended by the coalition:

- Public access points to the water trail from a road should be no more than 20 miles apart.
- Public access points from the water for both up- and down-stream travel should be no more than 10 miles apart.
- Educational information should be provided on dangers or hazards.
- Portages should be provided around dams and major navigational obstructions.
- Marked and coded signs should be easily visible from the river and contain the GCWT Logo.
- Day-use sites should provide for safe haul out and entry.
- Camping sites should be marked and provide safe haul out and entry, an area for tent site, and a maintained toilet facility.

6.3 Regional Uniqueness and Significance Assessment

The assessment of regional uniqueness of the Wells Project's primary recreation opportunities included reviewing results of visitor questionnaires, identifying recreational opportunities, and assessing the uniqueness of Project-related recreation opportunities.

6.3.1 Results of Visitor Questionnaires

Results of the Recreation Visitor Use Assessment (2005) were reviewed to confirm the Wells Project's primary recreation activities. Based upon the results of the 2005 Wells Visitor Use Assessment, fishing, boating, hiking, picnicking and swimming were expected to be among the top recreation activities in the Wells Project area. Results from the visitor questionnaire confirmed these activities. The majority of respondents reported fishing as the most common primary reason for visiting the Wells Project area. Relaxing/camping, and hiking were also common activities reported by respondents.

6.3.2 Regional Recreational Opportunities

The geographic draw of the Wells Project's top primary recreation opportunities was identified. This was done by assessing the geographic extent of visitors' origins and location of the alternative recreation resource areas where visitors participate in their primary recreation activities. Based on data from the 2005 Recreation Visitor Use Assessment, the majority of visitors (75 percent) to the Wells Project area primarily came Okanogan, King, Chelan, Snohomish, Douglas, Spokane, and Whatcom counties (Figure 6.3-1).

Table 6.3-1 Top counties of respondent residences.

County	%	n
Okanogan	31	101
King	14	45
Chelan	12	39
Snohomish	7	24
Douglas	5	15
Whatcom	3	11
Spokane	3	10

Many people visit the Wells Project during the summer to participate in recreation opportunities, including boating, fishing, hiking and RV camping. Additionally, sportsmen visit the area during the fall season to fish for steelhead and to hunt for waterfowl, upland birds and deer. Based on results from the visitor survey, a majority of the respondent visitors reside in Washington and were distributed between the Wells Project area and the west coast (89.3 percent). The highest number of visitor respondents were from Okanogan County at 31%.

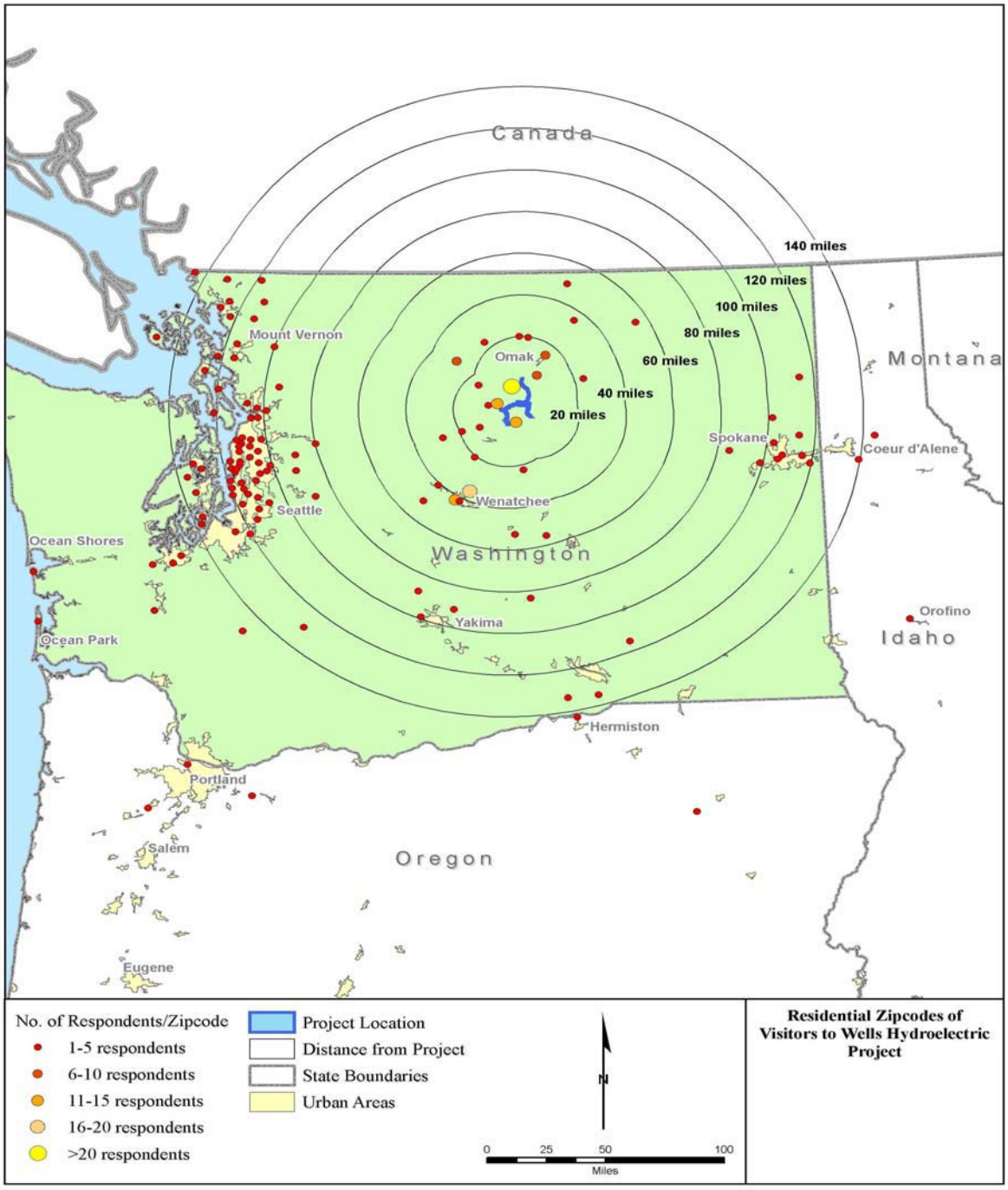

Figure 6.3-1 Distribution of residents visiting the Wells Project.

To meet the recreation needs of visitors, Douglas PUD has developed over 17 access sites and use areas along both sides of the Wells Reservoir and up the Methow and Okanogan rivers. In addition, Douglas PUD has funded and developed major parks and recreation facilities along the Wells Reservoir in Pateros, Brewster and Bridgeport.

6.3.2.1 Current Population Growth Rates and Recreation Need

Based on the 2005 Recreation Visitor Use Assessment, the majority of visitors surveyed came from Okanogan County. The projected average annual population growth rate of the combined counties (weighted) where a majority of visitors came from is expected to be 63 percent by 2050. Given that the majority of visitors utilizing the Wells Project likely originate from these counties and that the population growth rate is currently very slow, the immediate needs should be focused on upgrading current facilities as identified in the facilities assessment and access evaluation; plan for increased opportunities with the overall plan for the water trail; look at potential enhancements to increase wildlife viewing and hiking/walking opportunities. However, this may change as demographics and developments change over the course of the next 10 years and growth should be monitored by way of recreation use monitoring through a Recreation Management Plan.

Table 6.3-2 Top counties of visitor respondents residences.

County	2005	2010	2020	2030	2040 est.	2050 est.
King	**1,808,300**	**1,934,124**	**2,114,415**	**2,262,977**	**2,528,257**	**2,824,634**
Ind. Co. Growth Rate		1.07	1.17	1.25	1.40	1.56
Snohomish	**655,800**	**725,963**	**844,541**	**950,066**	**1,061,438**	**1,185,866**
Ind. Co. Growth Rate		1.11	1.29	1.45	1.62	1.81
Spokane	**436,300**	**466,724**	**529,451**	**589,623**	**658,742**	**735,964**
Ind. Co. Growth Rate		1.07	1.21	1.35	1.51	1.69
Whatcom	**180,800**	**195,633**	**230,008**	**261,416**	**292,061**	**326,298**
Ind. Co. Growth Rate		1.08	1.27	1.45	1.62	1.80
Chelan	**69,200**	**75,093**	**84,833**	**93,523**	**104,486**	**116,735**
Ind. Co. Growth Rate		1.09	1.23	1.35	1.51	1.69
Douglas	**34,700**	**39,222**	**44,877**	**49,627**	**55,445**	**61,944**
Ind. Co. Growth Rate		1.13	1.29	1.43	1.60	1.79
Okanogan	**39,600**	**42,739**	**46,526**	**49,239**	**55,011**	**61,460**
Ind. Co. Growth Rate		1.08	1.17	1.24	1.39	1.55
COMBINED	**3,224,700**	**3,479,505**	**3,894,658**	**4,256,479**	**4,755,449**	**5,312,911**
Ave. Growth Rate (unweighted)		1.08	1.21	1.32	1.47	1.65
Ave. Growth Rate (weighted)		1.08	1.21	1.31	1.46	1.63

Source: Office of Financial Management, State of Washington. Forecasting, October 2007, http://www.ofm.wa.gov/pop/gma/default.asp and are calculated based on the medium level growth projections.

6.3.2.2 Recreational Opportunities

Lands and waters included in the Wells Project boundary are not located within or adjacent to any of the following: (1) a National Wild and Scenic River System or a state-protected river segment, (2) lands under study for inclusion in the National Trails System or Wilderness Area, or (3) in the vicinity of any regionally or nationally important recreation areas.

Other recreation areas in the Wells Project vicinity up to about 20 miles outside the Wells Project boundary include:

- Alta Lake State Park – A 181-acre camping park located four miles southwest of Pateros on Highway 153;
- Bridgeport State Park – A 748-acre camping park located three miles northeast of Bridgeport on the Columbia River (Rufus Woods Lake) directly upstream of Chief Joseph Dam; and
- Fort Okanogan State Park – A 45-acre day-use park and interpretive center located near the mouth of the Okanogan River on a high plateau overlooking the Wells Reservoir. Table 6.3-3 provides attendance at this park from 1994 to 2007.

Table 6.3-3 Fort Okanogan State Park Attendance, 1994- 2007.

Year	# People
1994	3,370
1995	2,370
1996	1,376
1997	1,804
1998	2,249
1999	1,639
2000	1,207
2001	1,883
2002	2,803
2003	2,754
2004	3,772
2005	8,319
2006	9,921
2007	10,036

* Increase in attendance in 2005 result of volunteer partnership group that made improvements to museum, organized special speakers, and kept park open more often.

There are recreational and non-recreational uses adjacent to the Wells Project boundary. All of the lands owned by Douglas PUD are managed under Douglas PUD's Land Use Policy. Some lands adjacent to the Wells Project boundary, including portions of the Bridgeport Bar Wildlife Unit and Okanogan River Wildlife Unit, are owned by the WDFW. Both of these areas are units

of the Wells Wildlife Area. Douglas PUD participates in the funding of these areas. However, WDFW is responsible for managing these areas in accordance with its management procedures and policies. Additionally, the Fort Okanogan Interpretive Center is adjacent to the Wells Project boundary. The site is owned and operated by the Washington State Parks with frequent programs offered by the Okanogan County Historical Society and the Colville Confederated Tribes.

6.3.3 Uniqueness of Wells Project-Related Recreation Opportunities

The most popular primary recreation activities in the Wells Project area were identified as to whether or not they are of local, regional, or state significance. In addition, unique and special attributes of the most popular recreation opportunities are discussed based on information from regional resource information. The regional analysis focuses on recreation facilities both within the Mid-Columbia region (including Douglas, Chelan and Grant County PUD facilities), as well as other water based recreation facilities within an approximately 60-mile radius of the Wells Project area. Similar regional reservoir- and lake-oriented recreation opportunities are described below.

At the Wells Project, the primary activities are fishing, boating, swimming, camping, picnicking, and hiking. When comparing these activities to other reservoirs and lakes in the area (Table 6.3-4), these same types of recreational activities are available. In fact, many of the other reservoirs and lakes in the region share the same list of primary activities that are provided for in the Wells Project area.

In addition to the reservoirs and lakes, there are many other regional recreation opportunities in the vicinity of the Wells Project (within 60 miles). Other regional recreation resources are managed by a variety of entities and provide a multitude of recreation opportunities, some of which may be similar to those available in the Wells Project area.

Several of the primary regional recreation resources are federally and state managed. The Okanogan and Wenatchee National Forests are located in the region surrounding the Wells Project and both provide overnight and day use opportunities. While these opportunities are primarily land-based, they also have some water-based opportunities. The National Park Service manages the Lake Roosevelt and Lake Chelan Recreation Areas which provide a large number of water-based recreation opportunities in the region. Many state parks in the region also provide both land-and water-based recreation opportunities.

In addition to these resources, many of the towns, cities, and counties in the region surrounding the Wells Project also provide important recreation opportunities for both area residents and visitors alike. In addition, US Highway 97 is itself a National Scenic Byway. Some of these recreation resources also provide similar experiences and opportunities to those found in the Wells Project area; however, many are focused on more urban (e.g. city parks, ball fields, community centers, trails, etc.), land-based activities, and opportunities.

Table 6.3-4 Comparison of recreational activities at Project reservoirs and notable reservoirs in the Wells Project vicinity.

Facility Name	Surface Acres	Elevation (ft, msl)	Fishing	Motorized Boating	Non-Motorized Boating	Water-skiing/PWC	Swimming	Hiking	Picnicking	Camping	Bicycling	Sightseeing	Wildlife Viewing
Wells Project area	9,740	781	X	X	X	X	X	X	X	X	X	X	X
Other Water Based Recreation Opportunities													
Priest Rapids/ Wanapum Reservoirs			X	X	X	X	X		X	X		X	X
Rock Island Reservoir	3,300			X	X	X	X	X	X	X	X	X	X
Rocky Reach Reservoir	9,800			X	X	X	X	X	X	X			
Lake Chelan	33,000		X	X	X	X	X	X	X	X			
Rufus Woods Lake	8,400		X	X		X	X		X	X			
Franklin D. Roosevelt Lake			X	X		X		X		X			
Banks Lake	27,400		X	X		X	X	X	X	X			
Sun Lakes area	3,400		X	X	X	X	X	X	X	X			X
Billy Clapp Lake			X	X	X				X				
Moses Lake	6,800		X	X		X	X		X	X			X
Alta Lake State Park			X	X	X	X		X	X	X			
Omak Lake	3,200		X	X	X		X			X			

6.4 Public Access Analysis

Access to public use areas within the Wells Project by both land and water was assessed. Existing access features were rated as high, medium, or low quality. Opportunities and constraints within the Wells Project were identified, including compatibility with ADA. Public access (land and water) in the Wells Project area was identified and assessed by:

- Boating to dispersed sites and use sites along the shoreline, driving roads to access sites, and walking formal and informal user trails on lands designated as Wells Project access sites or wildlife areas;
- Defining existing water trail routes along the reservoir, current shoreline watercraft launch sites, constraints to watercraft access along the reservoir, and overnight stop-over sites; and
- Displaying public access sites and routes within the Wells Project on GIS maps.

The final analysis includes tables and maps summarizing locations where: (1) current facilities for access to the Wells Project are safe and efficient; (2) access is highly constrained; (3) future improvements could be implemented. Viable options for potential new or enhanced public access were identified for further consideration.

Wells Project Recreation Facility Evaluations

The following section provides a detailed description of the existing Wells Project recreation facilities and opportunities. In addition, this section evaluates the overall condition of existing facilities, any associated recreation use impacts, and the existing level of accessibility for disabled persons (utilizing ADA and [Architectural Barriers Act] ABA standards). In March 2008 DTA and Douglas PUD inventoried and evaluated the existing condition and accessibility of all the Wells Project recreation facilities.

Condition Evaluation Criteria

Facilities and amenities (e.g., vehicle spurs, tables, fire rings, ramps, etc.) were considered in "good" condition if they were functional, well-maintained, showed no signs of deterioration, and had the majority of their life expectancy remaining. Facilities and components were considered in "poor" condition if they were non-functional, had missing or broken parts, and/or major structural damage was evident. A facility was considered to be in "fair" condition when it had some minor structural damage that could be repaired with ease or was functional, but was showing signs of wear and tear (cracked wood, broken windows or door handles, etc.). Facilities in fair condition generally have a portion of their life expectancy remaining and do not need immediate replacement.

Accessibility Evaluation Criteria

The existing level of accessibility for disabled persons at each Project recreation facility was categorized as "universal", "partial" or "inaccessible". "Universal" accessibility means all the major physical amenities within a site or facility (campsite, picnic unit, boat ramp and restrooms) are accessible, including the access routes to each amenity. "Partial" accessibility means that at least one, but not all, of the site amenities is accessible. A site/facility is considered "inaccessible" if none of the amenities is designed for accessibility. An example of the form used to evaluate the condition is included in Appendix B.

Use Impact Evaluation Criteria

The recreation use impact evaluation at each facility/reservoir is categorized as "low", "moderate" or "high". Use impact is categorized as "low" when few, if any signs of use impact (e.g., litter, dumping, tree cutting, inadequate vegetation clearances, OHV use, and vegetation loss) are observed at each site; whereas use impacts are categorized as "high" when a site shows signs of extensive, widespread use with many of the previously noted impacts evident. "Moderate" use impact is indicative of several signs of use impact but not extensive or widespread impacts. In some instances, selecting a single impact category was not practical, and as a result, the impact level spans two categories (e.g., low-to-moderate or moderate-to-high). This broader categorization was typically used when a site or facility had some satellite areas

where impact conditions vary significantly from the majority of the site/facility. An example of the form used to evaluate the recreation use impact and the impact parameters is included in Appendix B. Indicators of fire hazards were also collected as part of the impact evaluation; and significant fire hazards are noted in this document, where applicable.

Representative photographs of the Wells Project recreation facilities and sites detailed in the following section can be found in Appendix C.

Memorial Park (City of Pateros)

In total, Memorial Park consists of a playground area, three picnic shelters, four floating boat handling docks, a shoreline path, a restroom building, and a parking area. These site components are surrounded by an expansive lawn for general use. The facility is accessed by vehicle off US Highway 97 on Lakeshore Drive. Each of these site components is evaluated below.

Picnic Shelters

Two of the picnic shelters consist of a concrete foundation (14 feet by 20 feet) with two metal picnic tables (8 feet long by 30 inches wide). These components are covered by an open-air shelter with a metal roof and a wooden frame and supports. The shelter has an asphalt entrance path (64 in. wide) branching off from the asphalt trail that winds along the shoreline. The shelter has electrical outlets, lights and a water spigot.

Overall, these picnic shelters are in good condition, especially the tables, metal roof, concrete foundation and entrance path. However, the wooden supports show isolated signs of rotting at the lower, more exposed portions of the supports. The picnic shelter is universally ADA compliant as the access routes to the shelter via the shoreline path, the concrete foundation and the picnic tables meet accessibility design requirements. Notably, only one of the picnic tables has an ADA compliant access route, while the second table lacks an access route due to the site layout constraints. Use impact at the site is low.

The other remaining shelter is situated on a larger concrete foundation (20 feet by 40 feet) with four picnic tables, a double-unit pedestal grill, a kitchen area (with two sinks/water faucets) and two metal trash receptacles. These elements (except the pedestal grill) are located beneath an open-air shelter with a metal roof and concrete block supports. The shelter has two access paths leading from the shoreline path and the parking area both of which are concrete, level paths measuring 64 inches wide. The shelter also has electrical outlets, lights, and running water.

Overall, this picnic shelter is in good condition with isolated elements only requiring some basic maintenance. The concrete supports are structurally in good condition, but are showing signs of weathering from exposure. The picnic shelter is universally ADA compliant as the access routes to the shelter via the shoreline path and parking area, the concrete foundation, pedestal grill and two of the four tables meet accessibility design requirements. The remaining tables are temporary. Use impact at the site is low.

Shoreline Path

The shoreline path runs for approximately one-third of a mile along the shoreline of Memorial Park without a barrier between the path and the adjacent lawn/grass area. The path starts near the restroom facility and winds along the entirety of the park, passes under the US Highway 97 bridge and ultimately connects to the Methow Boat Launch facility. The 8–foot wide path is constructed of asphalt (except for a roughly 30-foot wooden bridge section) and winds through the lawn/grass area of Memorial Park near the shoreline. The path is lined intermittently with light posts, interpretive panels and metal benches, and provides the public with access to the all of the amenities at Memorial Park via spur paths (either concrete or asphalt). Of note, the four interpretive panels are courtesy of the Okanogan Historical Society and provide a historical perspective for the site/area (e.g., sternwheelers, the Ive's Landing Hotel, Chinese miners, and the 1948 flood).

The path is in good condition including its ancillary elements (light posts, benches, and interpretive panels). However, the wooden bridge section of the path has several split/cracked railing sections and one light post has a broken light casing. The path is also universally ADA compliant with minimal slope and negligible cross slope throughout its entirety. Use impact is low.

Boat Handling Docks

Each of the four floating boat handling docks is accessed via short spurs with concrete steps (with railings) off the shoreline path. The docks vary in layout but each extends 60 feet from the concrete steps in three sections (20 feet by 8 feet), all of which are anchored by two steel pylons. Each dock section has four to six cleats for securing watercraft. Two of the boat handling docks have a 60 foot linear layout; whereas the remaining two have one and two additional dock sections attached perpendicular to the main linear dock section. All of the dock surfaces are constructed of synthetic wood boards with natural wood frames housing the floatation devices.

All the boat handling docks are in good condition; and the boat handling docks are not ADA compliant due to the steps needed to access the docks from the shoreline path. Use impact is low.

Playground Area

The playground area consists of two overhead arch ladders with handrails and a raised play structure with an enclosed tube chute and elevated play components such as coil climber, convex mirror panel, and a vertical loop climber. The components are constructed of a combination of plastic, metal and wood materials and the equipment is situated on a cushioned, rubberized surface. The playground components are surrounded by two fixed metal benches and a single fixed trash receptacle. A double-sided sign is located at the playground equipment and provides warnings and instructions for using the area.

Overall, the playground area is in good condition with all of the components having been recently installed utilizing modern materials and designed specifically for the outdoor environment. The playground is not ADA compliant as virtually all elements of the play

equipment are not designed to accommodate children with disabilities. Use impact at the site is low.

Restroom

A single restroom facility is located at the northeastern end of the park near the playground area. The facility is a concrete block structure with a metal roof and a concrete access path (48 inches wide) leading around the facility from the parking area. A water fountain, two trash receptacles, and numerous information signs and a map are located on the exterior of the facility. The interior of the facility is configured with a male and female side, each with three stalls with flush toilets, two sinks, one shower, and two hand dryers. The wall and floor surfaces are hard tile, while the stall barriers and doors are wood panels.

The interior of the restroom facility is in good condition; whereas the exterior is in fair condition with signs of wear/weathering on the concrete block walls and path. The restrooms are partially ADA compliant since some of the site elements meet standards (e.g. stall height, access path, entrance width); however, some other elements do not meet current standards (e.g. the stall door width, the turning space in the designated stall, sink knee clearance height/depth, and the handrail and paper dispenser heights/locations, etc.). Use impact is low.

Parking Area

The parking area is located on the inland side of the park and runs along much of the park's length with a curb separating the two areas. On the other side, the parking area merges with the road (Lakeshore Drive) without any delineation between the two elements. The parking area is asphalt with a curb along the park side of the parking area; and is 800 feet long and roughly 18 feet wide. The area is not striped except for a single ADA compliant parking space next to the restroom facility and several no parking areas where park access paths intersect with the parking area. The remainder of the parking area allows for pull-in and parallel parking options for up to 50 vehicles at one time (VAOT) (assuming vehicles only and not vehicles with trailers, recreational vehicles or campers).

The parking area is in good condition, but lacks striping and directional signage; and is partially compliant with ADA with one designated/marked space, but no other spaces designated. Use impact is low.

Methow Boat Launch (City of Pateros)

Overall, the Methow Boat Launch facility consists of a boat launch ramp with a wooden dock, restroom building, parking area, picnic tables, and basketball hoops. The facility is accessed by vehicles via a two-way spur road off of Warren Avenue; and by pedestrians via stairs from Warren Avenue and via the paved shoreline path originating at Memorial Park. The only facility identification sign is a small, generic boat launch sign including a symbol on Warren Avenue adjacent to the facility spur road. Each of these facility components are evaluated below.

Boat Launch Ramp and Handling Dock

The launch ramp is a concrete, single lane ramp measuring 20 feet wide by 80 feet long with a grooved surface for traction. A wooden, floating boat handling dock extends 50 feet long by 5 feet wide from a concrete landing, which includes a 10-foot gangway. The handling dock is constructed of a synthetic wood surface and natural wood frame housing the floatation devices. The dock includes 12 cleats for securing watercraft. Several signs are located at the boat launch ramp including a no swimming sign, harmful species warning sign, hydro benefit sign, and a cautionary sign regarding water level changes/exposed debris.

The boat launch ramp is in fair condition. The concrete ramp surface is showing signs of aging with cracked/eroding edges and upheaval at the concrete slab junction points; and the grooved surface has been worn down and smoothed out in many locations. The ramp remains functional. The boat handling dock is in poor condition with missing/damaged floatation devices causing the dock to sag into the water, damaged bumper strips, and signs of water damage/rotting along the natural wood frame. The handling dock is not ADA compliant in its current condition (cross slope is greater than 2 percent in its static position with flotation damage); however, if the flotation damage is resolved, then the dock will be ADA compliant and meet the cross slope and gangway slope requirements even at lower water levels. Use impact is low.

Restroom

A single restroom facility is located at the Methow Boat Launch facility. The facility is a concrete block structure with a metal roof and a concrete access path (48 inches wide) leading around the facility from the parking area. A water fountain, two impermanent trash receptacles, and two signs (information/map and hydro benefit signs) are located on/adjacent to the facility. The interior of the facility is configured with a male and female side, each with a separate access door, wall-mounted flush toilet, sink/faucet, ADA compliant handrails, wall electrical outlet, and a paper dispenser. The walls are constructed of drywall and the floor surface is concrete.

The restroom facility is in good condition. During the facility evaluation in March 2008, the toilet and sink in the male stall were being outfitted with new fixtures. The only sign of damage was at the base of the interior walls, where water damage was slightly evident. The restrooms are universally ADA compliant and use impact is low at the site.

Parking Area

The parking area is immediately adjacent to the restroom and boat launch ramp and dock. The parking area is asphalt with wood vehicle barriers along the periphery of the parking area. In all, the parking area measures 160 feet by 100 feet, but lacks striping for spaces and does not have a designated/marked ADA compliant space near the bathroom. The capacity of the parking area is approximately 26 VAOT. Four wood picnic tables are dispersed at the far end of the parking area and a metal bench and trash receptacle are located at the start of the shoreline path that leads to Memorial Park (refer to the Memorial Park description for details on the shoreline path). In addition, signs for no overnight camping and rules for dog owners are located next to the parking area.

The parking area is in good condition, but lacks striping and parking signage. Overall, the parking area is partially ADA compliant since the individual elements of the parking area are designed to accessibility standards (slope, clear space, etc.) but the area lacks any signage and properly designated/marked parking spaces. The picnic tables are not ADA compliant. Use impact is low.

Winter Boat Launch (City of Pateros)

The Winter Boat Launch facility consists of a boat launch ramp and boat handling dock.

Boat Launch Ramp and Handling Dock

The launch ramp is a single lane ramp measuring 20 feet wide by 52 feet long with a grooved surface for traction. A floating wooden dock (40 feet long by 5 feet wide) is located adjacent to the launch ramp which includes a 20-foot gangway. The dock is anchored to a single wood pylon. The handling dock is constructed of a synthetic wood surface and natural wood frame housing the floatation devices. The dock includes 10 cleats for securing watercraft. Five informational signs are located at the boat launch ramp including a an area map with general information, two harmful species warning signs, a hydro benefit sign, and a steelhead fishing closure sign. Notably, a launch facility identification sign does not exist; and there is no formal parking area associated with the launch ramp.

The boat launch ramp is in fair condition. The concrete ramp surface is showing signs of aging. The grooved surface has been worn down and smoothed out in many locations. The ramp remains functional, but is often out of the water when water levels are lower. [Note: Douglas PUD's 2007 Recreation Action Plan includes making upgrades to this boat launch ramp prior to 1012.] The boat handling dock is in fair condition with missing/damaged floatation devices causing the dock to sag into the water and signs of water damage/rotting along the natural wood frame, particularly at the metal hinge/junction areas of the frame. The handling dock is not ADA compliant for several reasons. First, the dock is accessed via a concrete pier/path which drops more than a foot over two steps. Second, in its current condition with flotation device damage, the cross slope is greater than 2 percent in its static position, which does not meet the standards. Third, once the flotation damage is resolved, then the dock will be accessible at higher water levels, and meet the cross slope and gangway slope requirements (no greater than 8.33 percent slope); however, at lower water levels (as were evidenced during the evaluation in March 2008), the vertical drop on the gangway from the concrete access path is greater than the 8.33 percent accessibility standard. Use impact at the predominantly paved or hardened concrete launch facility is low.

Peninsula Park (City of Pateros)

Peninsula Park is consists of a picnic shelter, playground area, swimming beach, gazebo, walkway, restroom, and parking area. The park is situated on a grass covered peninsula with views of the reservoir/Methow River, residential neighborhood and US Highway 97 Bridge. Visitors have access to the entire shoreline at the park. The facility is accessed via a residential neighborhood at the end of Riverside Drive (via Warren Avenue and Eveline Street).

Picnic Shelter

The picnic shelter is situated on a concrete foundation (20 feet by 40 feet) with five picnic tables (3 metal/2 wood), a double-unit pedestal grill, a kitchen area (with 2 sinks/1 water faucet) and one metal trash receptacle. These elements (except the pedestal grill) are located beneath an open-air shelter with a metal roof and concrete block supports. The shelter is accessed via a paved walkway leading from the parking area (see the walkway description below). The shelter also has electrical outlets, lights and running water.

Overall, this picnic shelter is in good condition with isolated elements only requiring some basic maintenance (cleaning, painting, etc.). The picnic shelter is partially ADA compliant as the access routes to the shelter via the shoreline path and parking area, and the concrete foundation met ADA accessibility design requirements; however, the picnic tables are not designed to ADA accessibility standards (lack necessary knee clearance). Use impact at the site is low.

Walkway

The walkway runs for approximately 250 feet without a barrier between the path and the adjacent lawn/grass area. The path starts at the parking area/restroom facility and leads to the picnic shelter. The 5–foot wide path is constructed of asphalt. A metal bench and trash receptacle are located roughly midway to the picnic shelter.

The path is in good condition including the bench and trash receptacle. The path is also universally ADA compliant with adequate and uniform width, slope, and cross slope throughout its entirety. Use impact is low.

Playground Area

The playground area consists of a single structure with elevated play components such as slides, steps and covered play with an attached overhead loop ladder. The components are constructed of a combination of plastic, metal, and wood materials and the equipment is situated on a cushioned, rubberized surface. A single fixed metal bench and a water fountain are located adjacent to the play equipment area.

Overall, the playground area is in good condition with all of the components having been recently installed utilizing modern materials and designed specifically for the outdoor environment. The playground is not ADA compliant as virtually all elements of the play equipment are not designed to accommodate children with disabilities. Use impact at the site is low.

Gazebo

Adjacent to the parking and playground area is a small wooden gazebo with a picnic table situated on a concrete pad with a concrete spur access path leading from the parking area. The wood structure is in fair condition as it is beginning to show signs of weathering with isolated instances of split wood, loose shingles on the roof, and separation at the joints of the structure. The wooden picnic table is in poor condition with much of the paint missing, and numerous

instances of battered edges on the tabletop and benches. The structure is partially ADA compliant with an accessible access route to the gazebo's useable area, but the picnic table does not meet ADA accessibility standards (knee clearance/depth). Use impact is low at this site.

Swimming Beach

No facilities are provided immediately at the swimming beach. Access to the area occurs via pedestrian travel across the lawn, where the ground surface drops several feet to a sand and rock beach area. A battered sign indicates that no lifeguard is on duty at the beach and visitors swim at their own risk (plus a Spanish translation). The swimming beach is not ADA compliant and has no visible signs of use impact.

Restroom

A single restroom facility is located at Peninsula Park. The facility is a concrete block structure with a metal roof and a concrete access path (48 inches wide) leading around the facility from the parking area. An impermanent plastic trash receptacle and a Project map with general information are located on/adjacent to the facility. The interior of the facility is configured with a male and female side, each with a separate access door, wall-mounted flush toilet, sink/faucet, ADA compliant handrails, wall electrical outlet, and a paper dispenser. The walls are constructed of drywall and the floor surface is concrete.

The restroom facility is in fair to good condition. The exterior of the structure is in good condition and needs some basic maintenance such as painting/refurbishing the surface due to the graffiti. The interior stall elements are all in good condition. The only sign of damage was on the interior walls, where water damage was evident (discoloration and peeling). The restrooms are universally ADA compliant. Use impact is low; and the graffiti on the exterior of the structure was the only sign of use impact.

Parking Area

The rectangular parking area utilizes the central section for vehicle circulation, whereas the periphery is utilized for pull-in parking. The parking area is constructed of asphalt with individual concrete curbs along the periphery of the parking area. In all, the parking area has capacity for 20 VAOT, but lacks striping for spaces and does not have a designated/marked ADA compliant space near the bathroom. In addition, a facility and project identification sign is located at the end of the parking area facing the peninsula and picnic shelter.

The parking area is in good condition, but lacks striping and parking signage. The facility/project sign is in good condition. Overall, the parking area is partially ADA compliant since the individual elements of the parking area are designed to accessibility standards (slope, clear space, etc.) but the area lacks any signage and properly designated/marked parking spaces. Use impact is low at this site component.

Riverside Drive Recreation Access (City of Pateros)

The Riverside Drive Recreation Access consists of a picnic shelter, restroom, informal parking area, and informal shoreline access. The park is situated on a narrow stretch of grass between a public tennis court facility (non-Project) and a private residence. The informal shoreline access provides views of the Methow River. Visitors have access to the entire shoreline at the park. The facility is accessed via a residential neighborhood on Riverside Drive (via Warren Avenue).

Picnic Shelter

The basic picnic shelter is situated on a concrete foundation (32 feet by 24 feet) with three wood picnic tables with metal frames, a water fountain, and one metal trash receptacle. These elements (including the restroom) are located beneath an open-air shelter with a metal roof and steel post supports. The shelter is accessed via a paved extension of the parking area.

Overall, this picnic shelter is in good condition with isolated elements only requiring some basic maintenance (cleaning, painting, etc.). The picnic shelter is partially ADA compliant as the access routes to the shelter via the parking area and clearances on the concrete foundation meet the standards; but the picnic tables do not meet ADA accessibility standards. Use impact at the site is low.

Restroom

A single restroom facility is located at beneath the picnic shelter. The facility is a concrete block structure and utilizes the picnic shelter's roof. A water fountain is located between the two stalls on the exterior wall of the structure. The interior of the facility is configured with a male and female side, each with a separate access door, wall-mounted flush toilet, wall mounted sink/faucet, ADA compliant handrail, and a paper dispenser. The interior walls are also constructed of concrete blocks and the floor surface is concrete. Notably, the interior components and the water fountain had been regularly vandalized and the fountain was removed. Also, there are no signs located at or leading up to the facility.

The restroom facility is in poor to fair condition. The exterior of the structure is in good condition and needs some basic maintenance such as painting/refurbishing the surface due to the graffiti. The interior stall elements and the exterior water fountain have all been recently and regularly vandalized; and as a result are in poor condition. The restrooms are partially ADA compliant since the sink clearances do not meet ADA accessibility standards. Use impact is low; and the graffiti on the exterior of the structure was the only sign of use impact. Of note, the stalls have no ceilings but rather are open to the roof support structures.

Parking Area

The parking area is constructed of asphalt with a continuous asphalt curb along the parking area nearest the picnic shelter. In all, the parking area has capacity for approximately eight VAOT; however, it is not clear where parking for this facility and the public tennis court facility begins and ends. In addition, the parking area lacks striping for spaces and does not have a designated/marked ADA compliant space.

The parking area is in fair condition, but lacks striping and parking signage. Overall, the parking area is partially ADA compliant as clearances, surface and slope conditions do exist for a potential ADA compliant parking space, but the curb currently inhibits the access route to the picnic shelter. Use impact is low at this site component.

Shoreline Access

The shoreline access is informal and lacks any developed elements. Access occurs across a grass covered area, which merges and drops several feet to the rocky shoreline. The shoreline is not accessible to persons with disabilities. Use impact is low.

Methow Fishing Access Site No. 1 (City of Pateros)

The Methow Fishing Access Site No. 1 consists of a large undeveloped shoreline parking area and two restrooms. The site is utilized primarily for fishing but also as a whitewater boating takeout location. The access site is situated on a strip of land between Ross Road and the Methow River varying in useable width from 25 to 75 feet. The informal shoreline access provides views of the Methow River. Visitors have access to the roughly half of the shoreline at the park; however, much of the access to the water line is via at least a 3-5 foot drop over varied terrain (boulders, loose rocks, and riparian vegetation), except at the undeveloped shoreline access at the eastern end of the site. The facility is accessed at each end of the site via short dirt and gravel spur roads off US Highway 153.

Parking Area

The undeveloped parking area consists of varied surfaces ranging from dirt, gravel, and paved asphalt sections. The site lacks marked spaces, vehicle circulation signs, and vehicle management barriers; however, the natural terrain provides a general barrier on the road and river side. The parking area is separated into three general sections that theoretically may accommodate as many as 50 VAOT if parking is coordinated/controlled; but the lack of marked spaces, vehicle circulation signage, and the irregularly shaped parking sections results in a reduced capacity, in actuality. The parking area also includes a steel trash dumpster, two interpretive panels (relating to aquatic benefits and a nature poem), and two information signs (litter responsibility and a hydro benefit sign).

The undeveloped parking area is in fair condition. The ground surfaces are varied throughout and the paved section is cracked and eroding on the edges. The remaining gravel and dirt parking surfaces are functional and meet the intended parking demands/uses. The parking area lacks adequate vehicle barriers to prevent vehicles from encroaching on the unstable shoreline and the grassy bank bordering the road. The parking area is inaccessible to persons with disabilities since ADA compliant routes to the shoreline and restrooms do not exist. Use impact at the site is low.

Restrooms

The two restroom structures are single vault units constructed of a concrete roof and walls with side windows and vents, and steel doors with handles and a vent. The entrance to the unit has two concrete privacy walls. The unit sits on a concrete pad that extends three to five inches beyond the walls. A project site identification sign with map is located on the exterior wall and is visible upon approach. On the interior, each unit consists of a stand-alone vault toilet, wall-mounted urinal, wall-mounted paper dispenser, and two aluminum handrails.

Overall, the restroom structures are in good condition. The concrete structural elements (walls, roof, and pad), windows and vents are all in good condition. The steel doors are also in good shape. The interior elements are in fair condition. The toilet and urinal fixtures are in good condition, but are dated; and the interior surfaces need some basic cleaning and maintenance. The restrooms are partially ADA compliant. The interior design meets ADA accessibility standards (except for the urinals), but the approach does not meet the ADA compliant route requirements, particularly the lack of maneuvering clearance at the door/entrance and the vertical change in level from the gravel access route and the concrete pad (exceeds ¼ inch standard). Use impact is low with some signs of graffiti on the interior and exterior of the restroom walls on one unit.

Methow Fishing Access Site No. 2 (City of Pateros)

The Methow Fishing Access Site No. 2 consists of a restroom and undeveloped parking area, and provides access to the Methow River shoreline along an informal grade down to the river. The access site is situated on lands owned and managed by the Washington Department of Fish and Wildlife (WDFW). The facility is accessed via a loose dirt and gravel road off Bill Shaw Road.

Restroom Building

A single restroom building is located at the site and is a CXT constructed unit with side windows and vents; roof vent; and a steel door with a handle and vent. The entrance to the unit is covered and has two concrete privacy walls and the entire structure rests on a concrete foundation. The CXT unit is an ADA compliant model, which consists of a stand-alone vault toilet, wall-mounted urinal, wall-mounted paper dispenser, and a continuous side and rear handrail. The exterior of the unit has three wall-mounted unisex restroom identification symbols and accessibility symbols.

Structurally, the restroom unit is in good condition; however, the interior and exterior of the unit have extensive graffiti in highly visible, fluorescent spray paint. The restroom unit is partially ADA compliant with only the lack of an ADA compliant route to the unit preventing universal accessibility. Use impact is moderate due to the extensive graffiti.

Parking Area and Access Road

The undeveloped parking area consists of a dirt and gravel surface with large boulders as vehicle barriers on three sides. The fourth side utilizes the steep slope as a barrier in place of boulders. The parking area measures 160 feet long by 35 feet wide, and has an approximate capacity of 15

VAOT, including a separate space marked for use by disabled persons only. Located adjacent to the parking area is an informational kiosk constructed of wood posts, panels, and roof. The kiosk houses three WDFW regulations signs (metal) related to vehicle parking rules, litter responsibility, and seasonal fishing regulations. Other signs around the parking area include the ADA compliant parking space sign (metal) and a second seasonal fishing regulations signs (laminated).

The parking area is in good condition and meets the intended primitive design demands. The parking area is inaccessible despite having a place designated for disabled persons only. The actual parking space conditions do not meet ADA compliant standards for width, clear ground space, and an ADA compliant route to the restroom. Use impact is low at the site with no visible signs of rutting, erosion, or encroachment on adjacent vegetation. The informational kiosk and other signs are in good condition, but are not ADA compliant.

Access Road

The access road to the parking area and restroom is constructed of dirt and gravel. The road is 425 feet long and 10 feet wide, and is designed as a one-way in/out access road. The initial approach of the road is steep, but the grade lessens as the road approaches the parking area. Vehicle passing areas do not exist. Two metal signs - a site identification sign and litter warnings ("Pack it out") sign – are located at the start of the access road.

The access road is in good condition; however, ingress from the west requires a sharp right turn, whereas the egress to the west is requires a sharp left turn with minimal line of sight up the road. Use impact is low.

Informal Boat Launch

The Informal Boat Launch consists of an informal parking area and launch area. The site has not been improved or developed by Douglas PUD and exists as a user-created shoreline access and launch site. The informal site is located on the left side of the reservoir directly across from the City of Pateros. The facility is accessed via the gravel Pateros Ferry Road.

Informal Parking and Launch Area

The gravel parking area is 80 feet by 70 feet and has an approximate capacity of 12 to 15 VAOT. The parking area has no vehicle management barriers and no information or directional signage is located at the site. The informal launch area is approximately a 40-foot clearing in the riparian vegetation, which provides a rough sloped access to the reservoir shoreline. There are no signs indicating the area is useable as a car-top launch site.

Both the parking and launch area are highly informal and in fair condition. The parking area is generally level, but during wet weather periods, the surface becomes rutted. The site is not ADA compliant for accessibility, but the informal nature of the site is not intended for to meet the accessibility criteria. Use impact is low.

Carpenter Island Boat Launch

Carpenter Island Boat Launch consists of an informal parking area, basic launch ramp, and two portable restrooms. The site is located immediately downstream of Wells Dam on a small inlet south of the fish hatchery tailraces. The facility is accessed via a paved road off US Highway 97 and then Azwell Road to a dirt/gravel road to the launch area.

Launch Ramp

The launch ramp consists of malleable concrete ramp measuring 75 feet long and 12 feet wide. The ramp is not a continuous concrete slabs but rather individual 8 inch-by-12 foot wide concrete planks reinforced with rebar. The ramp does not have any curb/edge protection and is set in the gravel/cobble shoreline material. The launch ramp does not have a boat-handling dock.

The launch ramp is in poor condition with the edges of most of the concrete planks cracked or eroded. Also, the lack of edge protection results in gravel and cobble building up atop the concrete ramp. The ramp is not accessible per ADA standards, particularly without a boat handling dock and gangway at the location. The visual environmental impacts to the site are low.

Informal Parking Area

The parking area consists of gravel and cobble surface that slopes towards the inlet and launch ramp with a useable space 100 feet by 70 feet. The site capacity is approximately 20 VAOT. Vehicle barriers are not present at the parking area. A metal trash receptacle and two portable toilet stalls are located at the site. The parking area has no other improvements. The dirt and gravel access road is narrow and steep with very sharp turning angles. The in/out road is designed for one vehicle at a time and lacks adequate passing/turn off areas.

The parking area is a primitive site and in fair condition with areas of loose gravel and rutted gravel/sand. The parking area and toilets are not compliant with the ADA standards for accessibility. Use impact is low. The access road is in fair condition.

Starr Boat Launch

The Starr Boat Launch facility consists of a boat launch ramp, parking area, and restroom building. The site is located on the west side of the reservoir roughly 2.5 miles upstream of Wells Dam. The facility is accessed via a gravel road (approximately 140 feet long) off US Highway 97.

Boat Launch Ramp

The launch ramp is a concrete two-lane ramp measuring 24 feet wide by 94 feet long with a grooved surface for traction. Several signs are located at the boat launch ramp including a harmful species warning sign, a river steelhead fishing closure, and a cautionary sign regarding water level changes/exposed debris. The launch ramp does not have a boat-handling dock.

The boat launch ramp is in fair condition. The concrete ramp surface is showing signs of aging with some cracking/eroding along the edges and at the slab junction points; and the grooved surface has been worn down and smoothed out in many locations. The ramp remains functional, but is not accessible to persons with disabilities, particularly without a boat-handling dock and gangway at the ramp. Use impact is low.

Restrooms

The single restroom building is a single vault unit constructed of a concrete roof and walls with side windows and vents, and a steel door with handle and a vent. The entrance to the unit has two concrete privacy walls. The unit sits on a concrete pad that extends three to five inches beyond the walls. A Project site identification sign with map is located on the exterior wall and is visible upon approach. On the interior, the unit consists of a stand-alone vault toilet, wall-mounted urinal, wall-mounted paper dispenser, and two aluminum handrails.

Overall, the restroom structure is in fair condition. The concrete structural elements (walls, roof, and pad), windows, vents, and door are all in good condition. However, the interior elements are showing signs of aging. The toilet and urinal fixtures are dated; and the interior surfaces need some basic cleaning and maintenance. The restrooms are partially ADA compliant to persons of disability. The interior design meets ADA accessibility standards (except for the urinals), but the approach does not meet the ADA compliant route requirements, particularly the lack of maneuvering clearance at the door/entrance and the vertical change in level from the gravel access route and the concrete pad (exceeds ¼ inch standard). Use impact is low with some signs of graffiti on the interior and exterior of the restroom walls.

Parking Area

The parking area is immediately adjacent to the restroom and boat launch ramp. The parking area is large square gravel area but lacks vehicle barriers except around the restroom building (where large boulders are present). However, the parking surface was graded and the gravel surface clearly delineates where parking is allowed. In all, the parking area measures 200 feet by 200 feet and lacks striping for spaces and does not have a designated/marked ADA compliant space near the bathroom. The capacity of the parking area varies significantly based on the type of vehicles, trailers, etc. But, the parking area would accommodate as many as 40 vehicles with trailers at one time (if parked in an organized manner). A steel dumpster is located near the restroom and initial entrance to the parking area and includes a litter/dumping awareness sign. In addition, a site regulation sign is located at the edge of the parking area indicating the site is for day use only and fires, tents, and camping are prohibited (including a Spanish translation).

The parking area is in good condition, but lacks striping and/or vehicle circulation/parking rules. Overall, the parking area is partially ADA compliant since the individual elements of the parking area are designed to accessibility standards (slope, clear space, etc.) but the area lacks any signage and properly designated/marked parking spaces. The gravel surface is firmly compacted and adequate for ADA compliant routes. Use impact is low.

Wells Overlook

The Wells Overlook facility consists of a picnic shelter, interpretive displays/walk, parking area and restroom building. The site is located on a bluff overlooking the lower end of the reservoir and Wells Dam on the west side of the reservoir. The facility is accessed via the paved Azwell Road off US Highway 97. A paved asphalt loop road provides parking and immediate access to the facility.

Picnic Shelter

The picnic shelter is situated on a concrete foundation (20 feet by 40 feet) with five metal picnic tables (unfastened to the concrete), a kitchenette (with 2 sinks/faucets), and two metal trash receptacle. The shelter also has electrical outlets, lights, and running water. These elements are located beneath an open-air shelter with a metal roof and concrete block supports. A portion of the concrete foundation (20 feet by 20 feet) is not under the shelter. The picnic shelter is accessed via a concrete walkway (60 inches wide) leading from the parking area near the restroom.

Overall, this picnic shelter is in good condition with only the kitchenette fixtures requiring some maintenance/replacement. The picnic shelter is partially ADA compliant as the access routes to the shelter via the shoreline path and parking area, and the concrete foundation met ADA accessibility design requirements; however the picnic tables are not designed to ADA accessibility standards (lack necessary knee clearance). Use impact at the site is low.

Adjacent to the picnic shelter is a large, contiguous grass field/lawn for multi-use activities (picnicking, relaxing).

Interpretive Displays and Exhibits

The interpretive area includes three exhibit areas each with interpretive panels. The first display consists of a rock with Native American pictographs (rock paintings) with an interpretive panel which provides the history of these paintings including in the Columbia River drainage. The display is situated on a concrete pad and covered by a metal roof shelter with steel posts. The second display consists of four interpretive panels that chronicle the history of hydroelectric uses of the Columbia River in Washington, including information and designs specific to the Wells Project. The display is situated on a concrete pad and covered by a metal roof shelter with steel posts. The third display consists of an original turbine runner (installed in the 1960s) that was replaced in the 1980s. The angled interpretive panel describes the process to remove, repair and/or replace the turbine runners in the Wells Dam. This display is open and lacks a shelter. All of the three displays are connected via concrete walkways (60 inches wide). All of the interpretive panels are angled for easy viewing atop steel posts anchored in the concrete under the shelters or adjacent to the featured displays. In between the displays and around the concrete walkway, the surrounding areas are landscaped with grass and small gardens.

Overall, the interpretive displays, exhibits, landscaping, and connecting walkway are in good condition and have been installed and/or replaced recently. The interpretive area is universally ADA compliant with access routes and panels that meet ADA accessibility design standards. In

addition, the concrete walkways that connect to the parking area and restroom are also ADA compliant. Use impact is low.

Parking Area

The loop shaped parking area is constructed of asphalt including contiguous concrete curbing. The parking area has a total of nine parking spaces. The parking space options include four standard pull-in parking spaces for vehicles, three parallel spaces for larger vehicles (campers, RVs/motorhomes, etc.), and two ADA compliant parking spaces -- one standard ADA compliant space and one van ADA compliant space, which share a common access aisle (96 inches wide) and a curb ramp that provides a central ADA compliant access point to all of the site elements (restroom, interpretive displays, and picnic shelter). In addition, two metal trash receptacles are located at the parking area. The parking area loop includes a central rotary with a curb and landscaping.

The parking area is in good condition as most of the site features were recently installed. The parking area is also universally ADA compliant with the number of spaces, size, access aisle, curb ramp, and routes all meeting standards. Use impact is low.

Restroom

A single restroom facility is centrally located between the picnic shelter/lawn area and the interpretive displays. The facility is a concrete block structure with a metal roof situated on a large concrete pad. In addition, concrete access paths (60 inches wide) provide access to the entrance doors at each of the units. At the front of the facility, the concrete pad extends 20 feet. A water fountain, trash receptacles, and two project information signs including a map are located on the exterior of the restroom building facility. The interior of the facility is configured with a male and female side, each with three stalls with flush toilets, two sinks, and two hand dryers. Notably, the male side stall setup consists of two urinals and one toilet stall as compared to three toilet stalls on the female side. The wall and floor surfaces are hard tile, while the stall barriers and doors are wood panels.

Overall, the restroom is in good condition with structural components (interior and exterior) and restroom fixtures/barriers are all in good condition and well maintained. As a whole, the restroom building is partially ADA compliant. The access routes, door clearances, maneuvering space, surfaces, and general footprint/layout meet ADA accessibility standards; however, some minor fixtures/elements do not meet current standards (turning space in the designated ADA compliant stall, sink knee clearance height/depth, and the paper dispenser heights/locations). Overall, use impact is low at the restroom facility; however, the inside of the men's entrance door has some significant graffiti and carvings into the metal door and frame.

Cassimer Bar Fishing Access

The Cassimer Bar Fishing Access facility consists of the gravel parking area, gravel access road and restroom building. The site is located on the north side of the reservoir near the confluence of the Okanogan and Columbia rivers. The facility is accessed via a gravel access road off US Highway 97 immediately east of the bridge that crosses the Okanogan River.

Gravel Access Road

The gravel access road is a 700-foot, one-lane road off US Highway 97. The road is lined on the inland side with a metal wire fence and by natural vegetation on the shoreline side until it nears the shoreline, where large boulders provide a vehicular barrier between the road and the shore. The road loops through the parking area and acts as a turnaround for vehicles. Several informal parking spaces are available intermittently along the access road. A secondary spur access road (one lane) breaks off the main access road in advance of the parking area/restroom elements that provides additional shoreline access. A covered metal trash receptacle is located off the secondary spur road to the shoreline.

The gravel access road is primitive, but in good condition with a hardened, compacted surface with adequate vehicle barriers (fencing/terrain/vegetation) that shows low use impact.

Gravel Parking Area

Overall, the gravel parking area is 80 feet long by 50 feet wide, but the access road loops through the parking area and is utilized as a vehicle turnaround. As a result, the capacity of the parking is 12 to 15 VAOT (including the two informal spaces along the access road). A covered metal trash receptacle is located at the center of the parking area (acting as a rotary); and a large metal regulatory sign is located on the periphery of the parking area, which indicates the facility is for day use only and fires are prohibited.

The gravel parking area is also a primitive facility element, but is also in good condition. The surface is hardened, compacted, and situated on level ground adjacent to the shoreline. The boulders provide adequate vehicle barriers to minimize vehicular impact on/near the shoreline. The trash receptacle and sign are in good condition. The parking area does not meet ADA standards since no signage or delineated spaces exist with clearances. Use impact at the parking area is low with no visible erosion, litter or fires.

Restroom

The single restroom building is a single vault unit constructed of a concrete roof and walls with side windows and vents, and a steel door with handle and a vent. The entrance to the unit has two concrete privacy walls. The unit sits on a concrete pad that extends three to five inches beyond the walls. A project site identification sign with map is located on the exterior wall and is visible upon approach. On the interior, the unit consists of a stand-alone vault toilet, wall-mounted urinal, wall-mounted paper dispenser, and two aluminum handrails. Large boulders act as vehicle barriers between the parking areas.

Overall, the restroom structure is in fair condition. The exterior elements (concrete walls, roof and pad, windows, vents, and doors) are all in good condition. However, the interior elements are showing signs of aging. The toilet and urinal fixtures are dated; and the interior surfaces need some basic cleaning and maintenance. The restrooms are partially ADA compliant. The interior design meets ADA accessibility standards (except for the urinals), but the approach does not meet the ADA compliant route requirements, particularly the slope of the entrance route. Use impact is low.

Columbia Cove Park (City of Brewster)

The Columbia Cove Park consists of three picnic shelters, a boat launch ramp, three boat handling docks, a swimming beach, two restroom buildings, a playground, and two parking areas. The facility is located in the City of Brewster on the north side of the reservoir. Vehicle access to the facility occurs via numerous paved roads through Brewster off US Highway 97. In general, the park may be divided into two distinct sites – one site each on the eastern shore and western shore of Columbia Cove. The majority of the site amenities are located at the eastern shore site including two picnic shelters, boat launching ramp with two handling docks, the primary parking area, swimming beach, playground, and a restroom building. The western shore site has a picnic shelter, boat-handling dock, small parking area, and restroom building.

Eastern Shore Amenities

Picnic Shelters

The eastern shore site has two picnic shelters of similar design. Both picnic shelters are situated on a concrete foundation (26 feet by 32 feet) with four concrete picnic tables (anchored to the concrete pad), a kitchen area (with two sinks/faucet), and three impermanent rubber trash receptacles. These elements are located beneath an open-air shelter with a metal roof and concrete block supports. The shelter is accessed via a paved walkway (5 feet wide) leading from the parking area adjacent to the restroom building. The shelter also has electrical outlets, lights, and running water.

Overall, the picnic shelters are in fair to good condition with isolated elements only requiring some basic maintenance (cleaning, painting, etc.). The kitchen/sink areas are missing the faucet and plumbing components and the cabinet doors are missing. The picnic shelters are partially ADA compliant as the access routes to the shelter via the shoreline path and parking area, and the concrete foundation met accessibility design requirements; however the picnic tables are not designed to ADA accessibility standards (lack necessary knee/toe clearance). Use impact at the site is low.

Boat Launch Facility

The boat launch facility consists of a launch ramp and two boat-handling docks. The launch ramp is a two-lane concrete ramp measuring 20 feet wide by 90 feet long; however, one lane of the ramp includes an additional ramp extension for a total of 180 feet. Boat-handling docks are located along each side of the launch ramp. Both boat-handling structures begin with permanent wood piers connected to floating wood docks by a metal gangway. The permanent piers extend

50 feet and are anchored to wood pilings with a metal railing along one side for 40 feet. The metal gangways extend 18 feet from the pier to the floating dock. The metal gangways are 48 inches wide and metal railings (32 inches high) on each side of the gangway. The floating wood handling docks differ in size. One dock is 58 feet long and 6 feet wide with 16 metal cleats; whereas the other dock is 32 feet long and 12 feet wide and has wood curb/edge protection along both sides. Both floating docks are fastened via wood pilings on one side of the handling dock. Informational signs located at the ramp and dock include two no swimming signs, harmful species sign, and a water level fluctuation/warning sign. A facility identification and hydro benefit sign are located at the entrance to the boat launch facility area.

The launch ramp is in good condition and overall the pier/boat-handling docks are in fair to good condition. The pier and gangways are in good condition; whereas the floating docks are in fair condition and show signs of wear, particularly at the hinges. The wood plank surface is functional but is showing signs of aging/weathering. Use impact at the launch facility is low.

Restroom

A single restroom facility is centrally located between the picnic shelters. The facility is a concrete block structure with a metal roof situated on a large concrete pad. In addition, concrete access paths (60 inches wide) provide access to the entrance doors at each of the units. The interior of the facility is configured with a male and female side, each with three stalls with flush toilets, shower stall, two sinks, and two hand dryers. Notably, the male side stall setup consists of two urinals and one toilet stall as compared to three toilet stalls on the female side. The walls and stall barriers are constructed of concrete blocks, while the ground surface is concrete. The toilet stall doors are metal. A Wells Project information sign including a map are located on the exterior of the restroom building facility.

Overall, the restroom is in fair to poor condition. Notably, the structural components (interior and exterior) are structurally sound and in good condition. However, some of the exterior ancillary elements are damaged or broken including some of the windows and vents. The interior amenities are mostly in poor condition. The toilets, urinals, sinks, hand dryers, and paper dispensers are aging, broken, damaged to some degree, and/or poorly maintained. The walls and ground surfaces in and around the toilet, urinal and shower faucets have severe stains. In general, the female side is in fair condition compared to the male side. As a whole, the restroom building is partially ADA compliant. The access routes, door clearances, maneuvering space, surfaces and general footprint/layout meet ADA accessibility standards; however, some minor fixtures/elements do not meet current standards (turning space in the designated ADA compliant stall, sink knee clearance height/depth, and the paper dispenser heights/locations). Overall, use impact is high in the restroom facility.

Playground Area

The playground area consists of a single structure with elevated play components such as slides, steps, and tubes/tunnels. The components are constructed of a combination of plastic, metal, and wood materials and the equipment is situated on a cushioned, rubberized surface.

Overall, the playground area is in good condition with some of the components showing signs of weathering. The playground is not designed to accommodate children with disabilities. Use impact at the site is low.

Swimming Beach

Access to the area occurs via pedestrian travel across the grass/lawn surface, where the grass surface abruptly transitions to the rock and sand beach surface via a vertical drop ranging from one foot to several feet. The swimming area is bounded by floating buoys. Two metal signs indicate that a lifeguard is not on duty at the beach and visitors swim at their own risk (plus a Spanish translation). The swimming beach is in fair condition, is not ADA compliant to persons with disabilities, and has no visible signs of use impact.

Parking Area

The parking area is a paved asphalt surface in a circular loop layout with asphalt curbing along the periphery of the parking area. The parking area provides parking for the day use areas (picnic shelters, restroom, playground, and swimming beach) and the boat launch facility. The parking area for the day use facilities has a capacity of 18 VAOT (pull-in parking); the parking for the boat launch facility has a capacity of 15 VAOT, or vehicles with trailers (pull-in parking); and an additional parking area is available along the turnaround road for approximately 8 VAOT (parallel parking). None of the parking spaces are striped. A separate, rectangular parking area (paved asphalt with curbs) is located adjacent to the restroom and has a capacity of approximately 20 VAOT (vehicles only).

The parking areas are in good condition, but both areas lack striping, parking signage, and vehicle circulation signage. Overall, the parking areas are partially ADA compliant since the individual elements of the parking area meets some ADA accessibility standards (slope, clear space, etc.) but the areas lack the required signage/designations for accessibility. Use impact is low.

<u>Western Shore Amenities</u>

Picnic Shelter

The picnic shelter is a smaller, basic shelter with 15 foot-by-20 foot concrete pad. Three concrete picnic tables (anchored to the concrete pad) and three impermanent rubber trash receptacles are located beneath the shelter. The open-air shelter has a metal roof and wooden supports. Notably, the shelter does not have a pathway leading to it, but rather requires travel across the lawn area of the park.

The picnic shelter is a more basic shelter, but is in fair condition. Some of the exposed wood frame components show early signs of aging and rotting, but the shelter remains structurally solid and functional. The metal roof is in good condition. The picnic shelter is not ADA compliant considering the structure lacks a pathway to the shelter, knee and toe clearances, and clear space requirements at the picnic tables. Use impact at the site is low.

Boat-Handling Dock

The boat-handling dock consists of a pier connected to floating dock by a metal gangway. The permanent metal pier extends 80 feet (60 inches wide) and is anchored to steel pilings with metal railings along each side (32 inches high). The metal gangways extend 36 feet (48 inches wide) from the pier to the floating dock with the same metal railings on each side. The floating metal grate handling dock is situated perpendicular to the pier/gangway and extends 80 feet by 8 feet. The wood curb/edge protection along all sides differs in size. The floating dock is fastened via four metal pilings. There are no informational signs at the pier/dock.

The pier/boat handling dock is in good condition. The dock is partially ADA compliant to persons with a disability with cross slope and the gangway slope at higher water levels (12 percent maximum grade) meeting ADA accessibility standards; however, when the water level drops the slope likely becomes too steep (greater than 12 percent) to meet accessibility standards. Also, the clearance space (60 inch minimum) for loading/unloading at the floating dock does not exist due to a wood curb/edge protection around the entire dock. Use impact at the site is low.

Restroom

A single restroom building is located at the end of the parking area near the picnic shelter. The restroom is a single vault unit (CXT model) with side windows and vents; roof vent; and a steel door with a handle and vent. The entrance to the unit is covered and has two concrete privacy walls and the entire structure rests on a concrete foundation. The CXT unit is an ADA compliant model, which consists of a stand-alone vault toilet, wall-mounted urinal, wall-mounted paper dispenser, and a continuous side and rear handrail. The exterior of the unit has two wall mounted unisex restroom identification symbols and accessibility symbols (although one sign is missing).

Overall, the restroom unit is in fair condition. The structural components of the unit are in good condition (walls, roof, and door); however, the exterior of the unit has extensive graffiti on the back wall. The restroom unit is universally ADA compliant. Use impact is moderate due to the extensive graffiti.

Parking Area

The parking area is a paved asphalt surface with a designated/striped day use parking are next to the picnic shelter for 9 VAOT. Additional parking for as many as 15 VAOT is allowed along the entrance road along one side of the road and at the turnaround along the inland side (parallel parking only).

The parking areas are in good condition, but only the parking area next to the picnic shelter has marked/striped parking. The other informal parking areas only have signs located along the entrance and turnaround portions of the road. Overall, the parking areas are partially ADA compliant since the individual elements of the parking area meets some accessibility standards (slope, clear space, etc.) but the areas lack the required signage/designations for accessibility. Use impact is low.

Brewster Waterfront Trail

The Brewster Waterfront Trail consists of a gravel trail with four access locations. The trail is located on the north side of the reservoir in the City of Brewster. The trail winds along the publicly ADA compliant shoreline, but abuts mostly private land/residences on the inland side of the trail/shoreline. The reservoir side of the trail is steep with large boulders. The facility does not have a restroom or formal parking area but rather utilizes street parking near the four public access locations.

The trail extends approximately one-half mile along the eastern facing shoreline of the peninsula where the City of Brewster is located. The trail is constructed of gravel along a benched area along the steep shoreline, which averages approximately 10 feet in width. The trail has ground level light posts dispersed throughout the trail, at the public access locations and along the access steps. Five wooden benches and trash receptacles are located throughout the trail and public access locations. Each public access location has concrete steps with metal railings that lead from the informal street parking down the steep shoreline to the benched trail. In total, four metal Project/facility identification signs and three directional signs are located at/near the public access points to the trail.

The trail surface is in good condition and level throughout the entirety. The ancillary amenities (trash receptacles, benches and light posts) are in fair to poor condition. The wood boards are showing signs of splitting and weathering; while the aluminum trash receptacles are damaged and rusted and a number of the light posts are broken. The trail is not ADA compliant for accessibility due to the steep concrete steps necessary for accessing the trail along the steep shoreline; however, the trail surface itself does meet ADA accessibility standards with a compacted/hardened surface, minimal grade and cross slope with ample space for passing/turning. Use impact is low at the site.

Okanogan River Informal Boat Launch Site #1

The Okanogan River Informal Launch site #1 consists only of a gravel boat launch ramp. The site is located on the river right of the Okanogan River off Monse River Road approximately three-quarters of a mile upstream from the US Highway 97 bridge that crosses the Okanogan River (RM 2 of Okanogan River). The informal launch ramp extends from Monse River Road to the water line. The ramp does not have a boat-handling dock, formal parking area, or restroom. Parking occurs along the side of Monse River Road.

The informal boat launch ramp is a single-lane ramp consisting of a gravel, dirt and loose rock surface that extends roughly 100 feet to the high water line (roughly 12 feet wide). The ramp has a substantial cross slope towards the water and lacks adequate space for a turnaround. The ramp does not have vehicle barriers. The site has five informational signs at the bottom of the ramp, but lacks a site identification sign. The five signs are a lake level/water hazards sign, no swimming sign, steelhead fishery regulations sign, lure restrictions for the summer Chinook fishery, and an invasive plant management sign.

The primitive launch ramp facility is in fair condition. The ramp is sloped and the surface material is loose and becomes soft with wet weather/conditions resulting in substantial rutting,

particularly at the base of the ramp. The informal ramp does not meet ADA accessibility criteria. Use impact at the site is moderate to high with ample evidence of trash including fishing line; as well as ramp surface damage related to wet conditions such as rutting and deep tire impressions from lack of traction/soft surface material.

Okanogan River Informal Boat Launch Site #2

The Okanogan River Informal Launch site #2 consists only of a gravel boat launch ramp. The site is located on river right of the Okanogan River on Monse River Road near RM 7 of the Okanogan River. The informal launch ramp extends from Monse River Road to the water line. The ramp does not have a boat-handling dock, formal parking area or restroom. Parking occurs along the side of Monse River Road.

The informal boat launch ramp is a single-lane ramp consisting of a gravel, dirt, grass, and loose rock surface that extends roughly 130 feet to the high water line (roughly 15 feet wide). The ramp does not have vehicle barriers. The site has two informational signs at the bottom of the ramp, but lacks a site identification sign. The two metal signs are a lake level/water hazards sign and a harmful/invasive species warning/management sign. The ramp lacks a formal parking area, but space for approximately three VAOT is available along the road side at the top of the ramp.

The primitive launch ramp facility is in fair condition. The ramp surface material is loose and lacks vehicle barriers, particularly along the river side of the ramp. The informal ramp does not meet ADA accessibility criteria. Use impact at the site is moderate with evidence of trash/litter including fishing line.

Monse Boat Launch

The Monse Boat Launch facility consists of a boat launch ramp, parking area, and restroom building. The site is located on river right of the Okanogan River on Monse River Road (at the Monse Bridge Road) near RM 5 of the Okanogan River. The facility is accessed via a gravel spur road off Monse River Road.

Boat Launch Ramp

The launch ramp is a separated concrete slab one-lane ramp measuring 12 feet wide-by-95 feet long. Each horizontal concrete slab is a grooved surface for traction. Five signs are located at the boat launch ramp -- a hydro benefit sign, harmful species warning sign, no swimming sign, cautionary sign regarding water level changes/exposed debris, and a wildlife habitat management area sign. The launch ramp does not have a boat-handling dock.

The boat launch ramp is in fair condition. Most of the individual horizontal concrete slabs are showing signs of aging with some cracking/eroding along the edges and the grooved surface has been worn down and smoothed out in many locations. The ramp remains functional, but is inaccessible to persons with disabilities, particularly without a boat-handling dock. Use impact is low with a few signs of litter adjacent to the ramp.

Restroom

The restroom building is a single vault unit constructed of a concrete roof and walls with side windows and vents, and a steel door with handle and a vent. The entrance to the unit has two concrete privacy walls. The unit sits on a concrete pad that extends three to five inches beyond the walls. A project site identification sign with map is located on the exterior wall and is visible upon approach. On the interior, the unit consists of a stand-alone vault toilet, wall-mounted urinal, wall-mounted paper dispenser, and two aluminum handrails. Four large concrete blocks act as vehicle barriers around the restroom.

Overall, the restroom structure is in fair condition. The concrete structural elements (walls, roof, and pad), windows, vents and door are all in good condition; although, the vents need maintenance to remove debris. In contrast, the interior elements are showing signs of aging. The toilet and urinal fixtures are dated; and the interior surfaces need some basic cleaning and maintenance. The restrooms are partially ADA compliant. The interior design meets ADA accessibility standards (except for the urinals), but the approach does not meet the ADA compliant route requirements, particularly the lack of maneuvering clearance at the door/entrance. Use impact is low with some signs of graffiti on the interior of the restroom walls of the unit.

Parking Area

The parking area is immediately adjacent to the restroom and boat launch ramp. The parking area is a large square gravel area but lacks vehicle barriers except around the restroom building. The parking surface has a minimal cross slope. In all, the parking area measures 100 feet by 140 feet and lacks striping for spaces and does not have a designated/marked ADA compliant space near the bathroom. The capacity of the parking area varies significantly based on the type of vehicles, trailers, etc. But, the parking area would accommodate as many as 20 vehicles with trailers at one time (if parked in an organized manner). A steel dumpster is located near the restroom and initial entrance to the parking area and includes a litter/dumping awareness sign. In addition, a site regulation sign is located at the edge of the parking area indicating the site is for day use only and fires, tents, and camping are prohibited (including a Spanish translation).

The parking area is in good condition, but lacks striping and/or vehicle circulation/parking rules. Overall, the parking area is partially compliant with ADA standards since the individual elements of the parking area are designed to accessibility standards (slope, clear space, etc.) but the area lacks any signage and properly designated/marked parking spaces. The gravel surface is firmly compacted in most areas. Use impact is low.

Chicken Creek Boat Launch

The Chicken Creek Boat Launch facility consists of a boat launch ramp, parking area, and restroom building. The site is located on the north side of the reservoir at Washburn Island. The facility is located on Colville Reservation lands and is adjacent to the Washburn Island Wildlife Area. The facility is accessed via a gravel spur road off US Highway 17.

Boat Launch Ramp

The launch ramp is a separated concrete slab one-lane ramp measuring 12 feet wide by 50 feet long. Each horizontal concrete slab is a grooved surface for traction. The launch ramp does not have a boat-handling dock. Five signs are located at the boat launch ramp -- a hydro benefit sign, harmful species warning sign, no swimming sign, cautionary sign regarding water level changes/exposed debris, and a wildlife habitat management area sign.

The boat launch ramp is in fair condition. Some of the individual horizontal concrete slabs are showing signs of aging, particularly the grooved surface which has some areas of worn/smoothed out surface. The ramp is not ADA compliant, particularly due to the fact that there is no boat-handling dock at the site. Use impact is low with a few signs of litter adjacent to the ramp.

Restroom

The restroom building is a single vault unit constructed of a concrete roof and walls with side windows and vents, and a steel door with handle and a vent. The entrance to the unit has two concrete privacy walls. The unit sits on a concrete pad that extends three to five inches beyond the walls. A project site identification sign with map is located on the exterior wall and is visible upon approach. On the interior, the unit consists of a stand-alone vault toilet, wall-mounted urinal, wall-mounted paper dispenser, and two aluminum handrails. Four large concrete blocks act as vehicle barriers around the restroom.

Overall, the restroom structure is in good condition. The toilet and urinal fixtures are dated but in good condition and the interior surfaces are clean and well maintained. The restrooms are partially ADA compliant. The interior design meets ADA accessibility standards (except for the urinal), but the approach does not meet the ADA compliant route requirements, particularly the lack of maneuvering clearance at the door/entrance. Use impact is low with some signs of graffiti on the interior walls of the restroom.

Parking Area

The parking area is immediately adjacent to the restroom and boat launch ramp. The parking area is a large gravel area and has a variety of vehicle barriers around most of the site. A wood post and wire fence provides a barrier on one side, whereas large concrete blocks act as vehicle barriers around the restroom building and along the inland side of the parking area. The parking surface has a minimal cross slope and measures 150 feet-by-100 feet and lacks striping for spaces and does not have a designated/marked ADA compliant space near the bathroom. The capacity of the parking area varies significantly based on the type of vehicles, trailers, etc. But, the parking area would accommodate as many as 25 vehicles with trailers at one time (if parked in an organized manner). Two aluminum trash receptacles with lids are located at the parking area. A small wood kiosk is located at the parking area for visitors to register before hunting in this area. In addition, five informational/regulation signs are located at the parking area – a no fire sign, harmful species warning sign, no swimming sign, cautionary sign regarding water level changes/exposed debris, and an unauthorized vehicle restriction sign.

The parking area is in good condition, but lacks striping and/or vehicle circulation/parking rules. In addition, the gravel parking area transitions into the adjacent sand and gravel areas due to the lack of vehicle barriers. Overall, the parking area is partially ADA compliant since the individual elements of the parking area are designed to accessibility standards (slope, clear space, etc.) but the area lacks any signage and properly designated/marked parking spaces. The gravel surface is firmly compacted in most areas. Use impact is low to moderate. The primary elements (launch ramp, parking area and restroom) have few signs of use impact; however, vehicles have driven beyond the gravel parking area and tire tracks are visible in and around the parking area, where vehicles are not allowed.

Marina Park (City of Bridgeport)

The Marina Park consists of a campground, two picnic shelters, a boat launch ramp, boat-handling dock, a swimming lagoon, two restroom buildings, a playground, and two parking areas. The facility is located in the City of Bridgeport. Vehicle access to the facility occurs via Jefferson Road. Eight benches, trash receptacles, and several fire rings are dispersed throughout the park in the day use areas (playground, walkways to the swimming lagoon, picnic shelters, and along the shoreline). An entrance sign, regulations sign, site fees sign and speed limit sign are all located at the entrance to the park. In addition, three other regulation signs and speed limit signs are dispersed throughout the park.

Campground

The campground consists of 18 RV campsites and four standard tent campsites. The RV campsites are all pull-thru spur designs (paved asphalt) and vary in length (12 sites are 50 feet long; 6 sites are 70 feet long) and all are between 12 and 16 feet wide. Each RV campsite has a metal picnic table (8 feet by 30 inches), a pedestal grill, fire ring, water spigot, and electric hookups. The four tent campsites each have a parking space, metal picnic table, and water spigot. Two fire ring/grill combination units are adjacent to the four tent sites.

The campground (RV and tent) and associated components are all in good condition. Of note, several RV vehicle spurs have roots up-heaving the spur. Some of the RV campsites are partially ADA compliant with accessible fire rings and tables, but the sites lack the necessary accessible routes to each amenity. Use impact is low at the campsites.

Boat Launch Facility

The boat launch facility is located at the western end of Marina Park and consists of a launch ramp, but lacks a boat handling dock. The launch ramp is a single-lane concrete ramp measuring 12 feet wide-by-350 feet long. In addition, a no swimming sign is located at the end of the ramp near the water line. A three-panel informational kiosk is located at the top of the launch ramp with a variety of safety information and warnings regarding boating and water hazards.

The launch ramp is in fair condition and is showing signs of aging/weathering. The ramp is not accessible to persons with a disability, particularly without a boat-handling dock. Use impact at the launch facility is low.

Restroom

Marina Park has two restroom buildings – a single unit CXT model at the boat launch and RV camping area and a larger multi-unit building near the tent campsites and concrete picnic shelter. The CXT model consists of a flush toilet, metal handrails, wall-mounted paper dispenser, sink, and a trash receptacle. The unit also has electrical outlets and light inside. The interior walls and floor are concrete. The exterior of the unit includes a fish cleaning sink, permanent trash receptacle, and a drinking water fountain. The restroom is accessed via a concrete pathway that ranges from 5 feet wide to more than 10 feet.

The CXT restroom is in good condition and is universally ADA compliant as the access routes, entrance, maneuvering space, and interior design all meet ADA accessibility standards. Use impact is low at the restroom facility.

The second restroom is centrally located between the camping area and the swimming lagoon adjacent to the concrete picnic shelter. The facility is a concrete block structure with a metal roof situated on a large concrete pad. In addition, concrete access paths (60 in. wide) provide access to the entrance doors at each of the units. The interior of the facility is configured with a male and female side, each with three stalls with flush toilets, shower stall, two sinks, and two hand dryers. Notably, the male side stall setup consists of two urinals and one toilet stall as compared to three toilet stalls on the female side. The walls and stall barriers are constructed of concrete blocks, while the ground surface is concrete. The toilet stall doors are metal. The exterior of the building includes a drinking water fountain, drink vending machine, and an aluminum trash receptacle. In addition, a Wells Project information sign with a map, rules/regulations board, and ADA accessibility signs are located on the exterior of the restroom building facility facing the parking area.

Overall, this restroom is in fair condition. Notably, the structural components (interior and exterior) are structurally sound and in good condition. However, some of the interior amenities are older models and showing signs of aging. For instance, the toilet and urinal fixtures are older, metal construction. As a whole, the restroom building is partially ADA compliant. Each side (male and female) has an ADA compliant toilet stall with proper amenities, but the urinals on the male side and the second and third toilet stalls on the female side do not meet ADA accessibility standards. However, the door clearances, maneuvering space, surfaces and general footprint/layout of the remaining units meet ADA accessibility standards. But the placement of the vending machine and metal post ADA compliant parking space sign make the original ADA compliant route to the male side inaccessible by restricting the clear space. Overall, use impact is low in the restroom facility.

Picnic Shelters

Two picnic shelters of different design are located at Marina Park. One shelter is situated in the midst of the campground and one shelter is found between the campground and swimming lagoon. The first picnic shelter (wood shelter) is an open-air design with a concrete floor (20 feet by 12 feet) wooden frame/ceiling and a metal roof. Three wood/metal frame picnic tables are located beneath the shelter which also has ceiling lights and electrical outlets. Wood/metal trash receptacle and water spigots are located adjacent to the structure. The concrete pathway (48

inches wide) connects the picnic shelter to the circulation road through the center of the campground.

Overall, the wood picnic shelter is in good condition as it has been recently constructed and in good operating condition. The wood picnic tables are showing some signs of wear/aging, but are still functional. The wood shelter is partially ADA compliant as the access routes and ground surface meet ADA accessibility standards, but the picnic tables do not meet the knee clearance or clear ground space requirements. Use impact is low.

The second picnic shelter (concrete shelter) is also an open-air design and is situated on a concrete foundation (26 feet by 40 feet) with a metal roof and concrete block supports. The shelter houses six wood/metal picnic tables, a kitchen area (with two sinks/faucet), and three trash receptacles. The shelter also has electrical outlets, lights, running water, and two pedestal grills outside of the shelter. The shelter is accessed via a paved walkway (5 feet wide) leading from the parking area via the restroom.

The concrete shelter is in fair to good condition as is it is an older construction (particularly compared to the wood shelter) and shows signs of aging in some areas, but remains functional. This shelter is partially ADA compliant as the access routes to the shelter via the concrete path, and the concrete foundation met ADA compliant design requirements; however, the picnic tables are not designed to ADA accessibility standards (lack necessary knee/toe clearance) and clear ground space requirements. Notably, the tables are not permanently anchored to the ground, so rearrangement of the tables could make the site ADA compliant. Use impact at the site is low.

Playground Area

The playground area consists of two separate structures -- an elevated play structure with slides, steps, tubes/tunnels; and a basic swing set. The elevated structure is constructed of a combination of plastic, metal, and wood materials and the equipment is situated on a cushioned, rubberized surface. The swing set is constructed of metal piping and four swings over a sand ground surface. The playground area is bounded on two sides by metal fencing including the road/parking side. The remaining two sides are open to the day use area extending towards the picnic shelter and restroom building. A multi-use sandbox/play area is located at the far end of the playground area.

Overall, the playground area is in good condition. The playground is not ADA compliant as virtually all elements of the play equipment are not designed to accommodate children with disabilities. Use impact at the site is low.

Parking Area

Parking areas are located adjacent to the boat launch, playground area, and the larger restroom and picnic shelter. Each parking area is paved asphalt with curbs and allows primarily for pull-in parking opportunities. The marked parking spaces allow for 10 double spaces for vehicles with trailers and 22 overflow/day use space for vehicles only. In addition, unmarked parking is available along the shoreline side of the parking area with space for as many as 20 VAOT (or trailers at one time). The parking area at the swimming lagoon is discussed later. The parking

area provides parking for both day user visitors (picnic shelters, restroom, playground, boat launch, and swimming beach) and overflow parking for the campground. Only portions of the parking spaces are striped.

Overall, the parking areas are in good to fair condition. The parking areas near the launch ramp and playground area along the shoreline side of the park, as well as the swimming lagoon parking area, are in good condition. The parking area immediately adjacent to the larger restroom building and picnic shelter is in fair condition with some surface cracks and faint space markings. In general, most areas lack striping, parking signage, and vehicle circulation signage. Overall, the parking areas are partly compliant with ADA standards since the individual elements of the parking area meets some accessibility standards (slope, clear space, etc.) but the areas lack the required signage/designations for accessibility. Use impact is low.

Swimming Lagoon

The swimming lagoon is located on the eastern end of Marina Park and is accessible by vehicle at a small parking area or by pedestrians via a narrow asphalt pathway. The lagoon includes a swimming beach, floating dock, gazebo, and parking area. The swimming beach is accessed via the paved pathway at the southeast end of the lagoon. The floating dock is located near the gazebo and parking area. The floating dock is constructed of wood with edge protection along the length of the dock and a metal ladder into the water. The dock is anchored to two metal pilings. The dock is accessed from the parking area via wooden steps with metal railings to a short (6 feet) wooden pier followed by a 15-foot wooden gangway with a metal railing on one side. The gazebo is located at the end of the parking area and is accessed via a concrete pathway (5 feet wide). The lighted gazebo has a concrete floor with metal supports, railings, and roof. The paved parking area with curbs has a capacity of 8 VAOT (pull-in parking), which includes one ADA compliant space and a vehicle turnaround where parking is prohibited.

The parking area and gazebo are in good condition. The floating dock, pier, and steps are in fair condition with exposed nails/screws and the wood materials are showing some signs of aging (split/cracked wood). Overall, the swimming lagoon is partially ADA compliant. The land-based components (parking area and gazebo) are designed for accessibility; however, the water-based components/amenities (swimming beach and dock) are not ADA compliant. Only the swimming beach has visible signs of use impact (moderate) with trash/litter dispersed throughout the beach area and adjacent riparian vegetation.

6.5 Needs Assessment

6.5.1 Project-Related Recreation Opportunities at Recreation Resource Areas

The first step in the needs assessment was to integrate recreation study findings into a summary of Project-related recreation opportunities at recreation resource areas. The existing condition of the recreation opportunity as well as the likely condition of the opportunity over the license term is described.

Overall, visitors surveyed were generally satisfied with both their recreation experience and the condition of facilities in the Wells Project area. Respondents rated their experience at the Wells Project rather highly, with an average rating of nearly 9 points on a 10 point scale where 95 percent of all respondents rated their experience a '7' or higher. Respondents enjoy the fishing opportunities, wildlife and scenery, access, and minimal crowding levels. When asked about their recreation experience, respondents generally agreed their trips were enjoyable; the areas were in good condition; there were enough patrols; and there were various places to choose from. Respondents also agreed they were free to adjust camping time and choose a variety of activities. Noise related to motorized boat use and other campers behavior did not interfere with their experience. Overall, respondents were noncommittal about their trip being better than expected.

From the visitor perspective, all areas received satisfactory ratings. Lower satisfaction ratings with boat ramps focused mainly on informal access sites and facilities in the Okanogan River area. More specifically, respondents indicated that the Monse Boat Ramp was not steep enough and the surrounding water was too shallow to adequately launch their boats, particularly at lower water levels. Suggestions for improvement included dredging the areas surrounding the launch ramp to enhance launching at lower water levels.

With respect to the other facilities evaluated during the 2005 Wells Visitor Use Survey, respondents indicated they were satisfied with RV campgrounds in all areas. The most commonly used facilities were RV campgrounds and boat ramps, with the remaining facilities receiving relatively little use among respondents. These results indicate that Wells Project survey area primarily draws respondents who are interested in fishing, camping, and water-related recreation. Notably, the few respondents who used these other facilities were satisfied with their condition – as most respondents rated them 7.2 or higher on a 10 point scale.

Community members identified the picnic areas and swimming areas as being highly utilized. Signage for navigating within the Wells Project area was identified as a need by the community members; but overall, respondents were generally satisfied with facilities provided within the Wells Project.

There are opportunities to fish, camp, boat, swim, and walk/hike. Overall visitors did not identify any unmet opportunities.

6.5.2 Summary of Major Recreation Issues Concerning Facilities

Below is a list of major recreation issues concerning the adequacy of various Project facilities.

- Issue: Adequacy of existing boat ramps, particularly during low water levels.

  Resource Areas Affected: Okanogan

Respondents expressed lower satisfaction with boat ramps in the Okanogan River area. More specifically, they indicated that the ramp was not steep enough and the surrounding water was too shallow to adequately launch trailerable boats, particularly at lower water levels.

Suggestions for improvement included dredging the areas surrounding the launch ramp to enhance launching at lower water levels.

- Issue: Availability of additional activities in the Wells Project area.

  Resource Areas Affected: All areas

Respondents are generally satisfied with recreation opportunities that occur within the Wells Project and in adjacent recreation areas. Anglers, one of the largest activity groups visiting the Wells Project area, are generally satisfied with their fishing experience, with a majority of all types of fisherman satisfied-to-extremely satisfied with their fishing experience. Visitors are enabled to participate in a range of activities and settings where those activities take place. People enjoy the scenery, easy and free access, range of activities, and facilities for public use. They also appreciate the convenience to the highway and transportation routes. Of the respondents, 91 percent enjoyed their trip and plan to come back in the future; while the majority of respondents (62 percent) stated that no other activities should be offered; those who did provided a variety of individual suggestions. For example, individual comments suggested fishing tournaments and more fishing opportunities for visitors, a fish stocking program for bass and walleye, better quality restaurants, water skiing slalom course, night fishing in the pools, a swimming beach, and a pool that is open on weekends.

- Issue: Condition and management of facilities in the Wells Project area.

  Resource Areas Affected: All areas

In general, 77 percent of the respondents were satisfied with the existing facilities. Of those that were not satisfied, several reoccurring facility improvements were provided. In most cases slight expansion of existing areas were requested, in other areas, increased or better maintenance would enhance the facility. When asked what they liked least, nearly 40 percent of respondents surveyed indicated there was nothing, while the remaining respondents raised issues such as low/high water levels, not catching any fish, litter, weather, and the need for better facilities. Overall, the number of improvements identified was rather low. Suggestions for improving facilities included drinking water facilities, larger toilet facilities, parking, updated restrooms with new showers, shoreline boat access, shoreline camping access, improved boat ramps near the Okanogan River, bathroom facilities for RV users, fuel docks, a garbage dumpster, and hiking trails along the shoreline.

Management issues were few and included increased information about water levels, access areas, wildlife (i.e., species of fish); and a range of restroom facility ideas, primarily related to keeping current facilities clean. Overall, respondents did not believe there needed to be more controls to prevent user conflicts or environmental damage in the Wells Project survey area. Those who did, however, suggested more law enforcement related to activities such as boating/jet ski safety and reducing the impact of litter and noise.

The majority of respondents felt that the existing facilities provided safe and reasonable access to the reservoir and shoreline. In total 7.5 percent of the respondents identified difficulty in

accessing the river or stream areas. Respondents generally felt safe at the Wells Project area, with less than 20 percent identifying places that they deliberately avoided. Reasons for avoiding areas included too many people, potential boat damage, water levels being too low, no camping allowed, rattlesnakes, and jet skis near Pateros.

With respect to changes or improvements to facilities, some were mentioned as part of other issues, yet the main areas identified by respondents included the following:

Brewster Resource Area:

- Would like to see full hook-up for RVs, shade trees, and clean bathrooms.
- Increase the size of the boat launch area, add another lane, and expand the ramp and docks.

Bridgeport Resource Area:

- Larger boat ramp and dock needed.
- Marina needs more space.

Pateros Resource Area:

- Need maintenance on toilet and shower facilities.

Okanogan Resource Area:

- Better boat launch at Monse, ramp needs to be steeper, and consider dredging the shallows following an analysis of access alternatives within the Okanogan Resource Area.

7.0 DISCUSSION

A range of seasons were utilized to assess recreation needs at the Wells Project, including visitor use and activities data; statewide reports; discussions with local community members, and authorities such as the WDFW; assessment of facilities and impacts to recreation sites; and supporting trend data from county and state resources. The following discussion items will summarize the overall findings identified from results above, which include results of the facilities inventory, discussion with communities, and other relevant stakeholders (i.e., WDFW); as well as reports and trends data as identified.

7.1 Activity Participation and Use Trends

Visitors traveled primarily with family (49 percent), but noticeable differences existed between some resource areas. Visitors who responded highest to family as the type of group they were with were at the Wells Overlook, Pateros, and Brewster resource areas, which all had 50 percent or higher family/multiple family responses. Another notable response was organized groups, which were relatively low for all resource areas. Additionally, visitors to the Wells Project

generally traveled in groups of nearly 6 if they were staying overnight and nearly 4 if just on a day trip. Visitors that stay overnight, generally stay for a minimum of 1 day and maximum of 120 days, with an overall mean of 7 days and seem to enjoy RV parks or campgrounds as their preferred overnight accommodation.

Of those that travel to the Wells Project, the majorities consider the area their primary destination (79 percent), with the rest of travelers stopping en-route (15 percent), or are simply just taking a side trip to the Wells Project area (6 percent), which was the minority. For community members, fishing, swimming, and picnicking facilities were most often utilized.

Fishing was reported as the most common primary reason for coming to the Wells Project by visitors to the area—with the Okanogan resource area visitors particularly focused on fishing as a primary reason for visiting the area. However, for most resource areas, the primary reason for visiting was varied within each particular resource area. The broad array of responses depicts the range of experiences that individuals within the Wells Project survey area. Responses as to visitors' primary reason for visiting include activity-oriented responses, land and water, as well as other experiences such as visiting with friends and family, outings with friends, tournaments and events, proximity to other recreational opportunities and it is a good place to rest en route to a different destination.

As a water-based project, boating is a significant recreational activity at the Wells Project and adjoining recreation facilities. Fifty percent of all respondents visiting the Wells Project engaged in boating, of which 61 percent was from a fishing boat, followed by speed/sport boats (29 percent). These numbers demonstrate the importance of fishing and other water-based activities to visitors. However, due to increased influence of gasoline prices and new developments with increased visibility such as the establishment of a water trail on the Columbia River corridor, there are indications non-motorized boating may be on the rise. Additionally, there are indications based on the Washington SCORP and analysis of increasing recreational activity trends, that non-motorized boating may increase, especially with the advent of a water trail in the area.

Overall, visitors rated their experience at the Wells Project rather highly, with an average rating of nearly 9 points on a 10 point scale where 95 percent of all respondents rated their experience a '7' or higher. Respondents enjoy the fishing opportunities, wildlife and scenery, access, and minimal crowding levels. With respect to crowding levels, the majority of respondents felt the number of people they encountered was 'neither too few' nor 'too many', or did not have any effect on their overall level of enjoyment. Facilities within various resource areas were also rated slightly to not at all crowded. However, respondents did report that RV/Campgrounds were more crowded than other facilities, especially in the Bridgeport resource area. For example, of those that identified an area as slightly crowded or higher (n=37), 18 respondents were from the Bridgeport Marina Park, with all other areas with 4 or less responses.

The majority of respondents (62 percent) stated that no other activities should be offered. Those who did indicate other activities should be offered were asked to provide open-ended comments about what should be made available. However, minimal open-ended comments were received. Those that were provided included facility, activity, and management oriented items. With

respect to activities, some would like to see fishing tournaments and more fishing opportunities for visitors, a fish stocking program for bass and walleye, better quality restaurants, water skiing slalom course, night fishing in the pools, a swimming beach, and a pool that is open on weekends. Concerning facility items, visitors mentioned drinking water facilities, larger toilet facilities, parking, updated restrooms with new showers, shoreline boat access, shoreline camping access, improved boat ramps near the Okanogan, bathroom facilities for RV users, fuel docks, a garbage dumpster, and hiking trails along the shoreline. Management issues were few and included increased information in about water levels, access areas, wildlife (i.e., species of fish); and a range of restroom facility ideas, primarily related to keeping current facilities clean.

Respondents generally felt safe at the Wells Project area, with less than 20 percent identifying places that they deliberately avoided. Reasons for avoiding areas included too many people, potential boat damage, water levels being too low, no camping allowed, rattlesnakes, and jet skis near Pateros.

The majority of respondents felt that the existing facilities provided safe and reasonable access to the reservoir and shoreline. In total 7.5 percent of the respondents identified difficulty in accessing the river or stream areas.

With respect to changes or improvements to facilities, some were mentioned as part of other issues, yet the main areas identified by respondents included the following:

Brewster Resource Area:

- Interest in full hook-up for RVs, shade trees, and clean bathrooms;
- Provision of tent camping sites;
- Increase the size of the boat launch area, add another lane, and expand the ramp and docks;
- Interest in improving and expanding riverside trails.

Bridgeport Resource Area:

- Larger boat ramp and dock needed;
- Marina needs more space.

Pateros Resource Area:

- Need maintenance on toilet and shower facilities;
- Consider upgrades for ADA compliance.

Okanogan Resource Area:

- Better boat launch at Monse, ramp needs to be steeper, and the shallows dredged.

In general, 77 percent of the respondents were satisfied with the existing facilities. Of those that were not satisfied, several reoccurring facility improvements were provided. In most cases slight expansion of existing areas were requested, in other areas, increased or better maintenance would enhance the facility. Overall, the number of improvements identified was rather low.

With respect to experience settings at the Wells Project survey area, respondents felt that overall they experienced a 'developed setting' on the reservoir, but would prefer a semi-primitive setting. This provides some support to sensitivities regarding perceptions of crowding and change of participation behavior over time. For wildlife viewing and hunting activities, respondents felt these areas were semi-primitive and would prefer primitive settings. Respondents visiting undeveloped shorelines preferred and experienced primitive settings. In the developed areas such as campgrounds, picnic areas, and playgrounds, expectations and preferences generally are in agreement with what is generally perceived as a developed setting.

Some individuals felt that the quality of their recreation experience had changed over time. While this number is small (n=17), the comments made should be mentioned for consideration. For example, a small minority of people felt that areas were more crowded than they used to be, others felt trash was an issue, and still others felt that the water levels were affecting bass and walleye populations, placing them in decline.

Regardless of the issues and concerns identified by visitors, overall the experience people have is rated highly. Community members would like to see additional signage, but overall did not identify significant changes. One new consideration not identified by visitor in the 2005 survey, was the addition of some signs in Spanish, especially those that dealt with safety (i.e., no swimming areas) or information issues (interpretive or directional signage).

Anglers, one of the largest activity groups visiting the Wells Project area, are generally satisfied with their fishing experience, with a majority of all types of fishermen satisfied to extremely satisfied with their fishing experience. Visitors are generally quite satisfied with recreation opportunities that occur within the Wells Project and in adjacent recreation areas. Visitors are enabled to participate in a range of activities and settings where those activities take place. People enjoy the scenery, easy and free access, range of activities, and facilities for public use. They also appreciate the convenience to the highway and transportation routes. Ninety-one percent of respondents enjoyed their trip and plan to come back in the future.

7.1.1 General Operation and Maintenance Recommendations

The Wells Project includes recreation facilities and improvements under FERC's jurisdiction at Wells Reservoir, which are operated and maintained by one of five different entities. The City of Bridgeport operates Marina Park. The City of Brewster operates Columbia Cove Park and Brewster Waterfront Trail. The City of Pateros operates Memorial Park, Methow Boat Launch and Peninsula Park. Douglas PUD operates the Cassimer Bar Fishing Access, Chicken Creek Boat Launch, Okanogan River Informal Launch No. 1, Okanogan River Informal Launch No. 2, Monse Boat Launch, Winter Boat Launch, Riverside Drive Recreation Access, Methow Fishing Access No. 1, Informal Boat Launch (Pateros), Starr Boat Launch, Wells Dam Overlook, and

Carpenter Island Boat Launch. The Washington Department of Fish and Wildlife operates Methow Fishing Access No. 2.

All of the recreation facilities and sites are within or immediately adjacent to the FERC Wells Project boundary; and most of the facilities are either located on Douglas PUD land or lands associated with towns and cities along the Wells Reservoir. Despite varying entities that operate and maintain the Wells Project recreation facilities, all of the facilities should be subject to the same level of routine, day-to-day maintenance activities. Routine maintenance is considered short-term maintenance activities and defined as repair, prevention, and cyclic maintenance, as compared to long-term maintenance (replacement and rehabilitation of facilities). Routine maintenance is discussed below by "short-term" and "annual" maintenance. The following Tables (7.1-1 and 7.1-2) outline the key types of routine maintenance that should be undertaken at each facility (depending upon the site amenities offered at the site).

Table 7.1-1	**Routine short-term maintenance recommendations for the Wells Project recreation facilities.**
SHORT-TERM MAINTENANCE (includes those activities that occur on almost a daily or weekly basis, and are the responsibility of Operator)	
Utilities	Maintenance of utilities (water, septic system, garbage removal).
Cleaning	Operator shall clean all facilities regularly in accordance with accepted site cleaning practices.
Vandalism	Graffiti or signs placed by the public will be removed and the facilities restored by Operator at its cost after Operator becomes aware of the graffiti. Operator shall take reasonable measures to prevent vandalism in the facilities.
Other Minor Short-Term Maintenance	Operator shall perform all minor maintenance work on an as-needed basis. Such duties shall include, but not be limited to: replacing broken toilet paper holders; applying disinfectant and deodorants in toilets; replacing gaskets in leaky faucets; straightening sign posts; tightening door hinges; removing all nails, ropes, poles, and wire from trees and facilities; and straightening and replacing barriers along roadways and spurs; painting picnic tables; cleaning fire pits; cleaning and repair of fish cleaning stations, etc.
Boat Handling Docks	Operator shall be responsible for the removal of the docks at the end of the season. In addition, moving hardware on boat docks, especially floating docks (e.g. hinges, pins, etc.) that link boat dock sections together, should be inspected regularly to ensure safe operation of the docks. Running strips or bumpers around the boat-dock contact points should also be regularly inspected to ensure the parts are all well fastened and functioning properly.

Table 7.1-2	**Annual maintenance recommendations for the Wells Project recreation facilities.**	
ANNUAL MAINTENANCE (includes those activities that are expected to occur on an annual or semi-annual schedule, and are the responsibility of the Operator)		
Equipment	Operator shall inspect the conditions of all facilities prior to opening day each year. The facilities included in this provision are: picnic tables; cooking grills; water hydrants; boat docks; benches; fee collection stations; changing rooms; picnic shelters; fire rings; drinking fountains; trash receptacles; signs (entrance, directional, and informational); fish-cleaning stations; lights/lamps (indoor and outdoor); restroom/comfort stations; and playground equipment.	
Recommended Schedule of Annual Maintenance		
Maintenance Activity		*Target Date for Action*
Straighten all barriers		Prior to opening day
Create/maintain parking lines for parking areas to assist in parking management		
Paint interior of all restrooms		At end of 3-year period
Paint or stain all bulletin boards		At end of 3-year period
Paint entrance signs		At end of 3-year period
Paint/stain all exterior wood surfaces excluding roofs of all restrooms		At end of 3-year period
Paint all picnic tables		At end of 3-year period
Install and remove boat dock		Beginning and end of operating season
Winterize and de-winterize water supply system		Beginning and end of operating season
Pump vault toilets		As needed, but at least at end of operating season

7.2 Unmet Demand Considerations

The Washington SCORP identified the following as the top recreational activities in Washington with the highest latent demand (Table 7.2-1). Overall, the results showed Washington residents most often engaged in low cost activities that were close to home and participated in multiple activities that intersected throughout the categories.

Table 7.2-1 Washington residents' recreation activities with high latent demand.

Activity	Activities within the Wells Project
Walking/hiking	Appropriate
Outdoor team and Individual sports	N/A
Nature activities	Appropriate
Sightseeing	Appropriate
Bicycle riding	N/A
Indoor	N/A
Picnicking	Appropriate
Water activities	Appropriate
Snow/ice activities	N/A
Fishing	Appropriate
Camping	Appropriate
0ff-road vehicles	N/A
Hunting/shooting	Appropriate
Equestrian activities	Appropriate
Air activities	N/A

Walking/hiking

Just over 6 percent of the total number of respondents to the 2005 Recreation Use Survey identified hiking and walking as an activity they participated in. Currently there is the Brewster Shoreline Trail which extends approximately 1/2 mile, and a paved trail in Pateros (Memorial Park) which is 1/3 mile. This type of activity is appropriate for the Wells Project Area, as it provides access to wildlife viewing, sightseeing, and fishing, as well as opportunities for outdoor enjoyment.

Nature Activities

The Wells Wildlife Area located within and immediately adjacent to the the Project, provide nature activities such as birdwatching, wildlife viewing, and nature photography. Birdwatching may be a growing activity, as demonstrated by the request for birding brochures in the area, and overall on the rise in not only Washington State, but nationwide. Wildlife viewing was an activity identified by just over 65% of those surveyed in 2005.

Sightseeing

The Wells Project vicinity is considered to be quite scenic, and there are opportunities around Wells Reservoir for sightseeing, such as at Wells Overlook. Sightseeing is an appropriate activity for the Wells Project Area and one identified by only a few respondents (2.4%) on the 2005 Recreation Use Survey.

Bicycle Riding

Just over 4% of respondents identified participating in bicycling in the Wells Project Area. The Project per se does not provide the facility/roadways specific for this activity. These activities take place on county roads and highways and are unrelated to the Project resources.

Indoor Activities

Indoor activities were not identified by respondents, nor appear to be consistent with the Wells Project.

Picnicking

Picnicking is a popular activity identified by nearly 8 percent of all of respondents visiting the Project in 2005. Several picnic sites exist and appear to be a popular and appropriate activity for the Wells Project.

Water Activities

There are several types of water-based activities (other than fishing) identified by visitors and that appear to be appropriate uses of the Wells Project area. These include: swimming (11.4%), pleasure boating/speed boat (29.4%), canoeing/kayaking (4%), and jet skiing (3%). Rafting activity within the Wells Project was limited to the lower 1.5 miles of the Methow River, which is used as a takeout location.

Fishing

Fishing was identified as the most popular activity at the Wells Project. Over 15% of respondents fished from the shoreline, and nearly 35% fishing from boats. Further, nearly 63% of all respondents identified fishing as their primary reason for coming to the Wells Project.

Camping

Camping was reported by 149 visitors or 41% of respondents overall. Camping is provided for and popular and appropriate activity at the Wells Project.

Hunting/shooting

Hunting is allowed on Douglas PUD land around the reservoir where it is consistent with adjacent land use activities. Hunting is encouraged within the Wells Wildlife Area. Hunting within the wildlife area is management and monitored by the Washington Department of Fish and Wildlife. The responses by those participating in this activity was relatively low (2.4 percent of all those surveyed). Based on the design and intended use of the various wildlife areas found within the Wells Project, hunting is an appropriate activity within the Project.

Snow/ice Activities

Snow and ice activities were not identified by any of the respondents to the Wells Visitor Use survey or the community surveys and focus groups. As a result, snow/ice activities do not appear to be a desirable or appropriate recreation activity at the Wells Project.

Off Road Vehicle Use

Based on the results of the 2005 Visitor Use Survey, none of the respondents identified ORV use as an activity that takes place at the Wells Project. This does not appear to be an appropriate activity related to Project resources, and there are few if any locations within the Project boundary that would accommodate ORV use.

Equestrian

Of all the visitors to the Wells Project Area, 4 respondents identified Equestrian as an activity they participated in during the summer of 2005. There are few locations within the Project boundary that would accommodate equestrian activities, which are unrelated to Project resources.

Air Activities

While there does appear to be ballooning guides in the area, air activities were not identified by respondents as a need or an activity that currently takes place within the Project boundary and are unrelated to Project resources.

Summary

Based on the information gathered in the visitor surveys, no potential activities with high unmet demand were identified within the Wells Project area. However, water-related recreational activities have specific constraints; and participation in these activities is potentially prevented due primarily to the condition of facilities. For example, respondents reported lower satisfaction with the Monse Boat Ramp. More specifically, they indicated that the ramp was not steep enough and the surrounding water was too shallow to adequately launch their boats, particularly at lower water levels. Respondents suggested dredging the areas surrounding the launch ramp to enhance launching at lower water levels.

7.3 Future Demand Projections and Potential Events that May Alter Future Use

While the overall Project use estimate over the term of the new license will likely be driven by the population growth of Chelan, Douglas, Okanogan Counties and the Seattle area, it is important to examine what the specific activities are that may shift the types of recreation uses within the overall Project use area. Utilizing the results of the Recreation Visitor Use Assessment conducted in 2005, the top two primary reasons for visiting the Wells Reservoir were identified: fishing (31 percent) and water skiing/wakeboarding (9 percent). After the top two reasons, the percentage of visitors surveyed was 6 percent or less; and, the next three reasons for visiting Wells Reservoir were not activity specific, but rather (1) to have fun/relax, (2) stop en route to another destination, and (3) living nearby. Thus, fishing and water skiing/wakeboarding will be the key activities examined for trends within overall use over the next likely term of the license (through 2050).

Based on Cordell's indices, by the year 2050 the average percent of the population who will participate in fishing will increase by 7 percent to 36 percent of the population. Even though motor boating (including water skiing and wakeboarding) is also expected to increase in popularity by 12 percent over the same term, these projections should be tempered with externalities mentioned previously. Gas prices are likely to affect participation in motorized water recreation potentially causing the expected increase in these activities to be lower than anticipated, yet the actual impact of this event is unknown at this time.

Despite a lower growth rate through 2050 than motor-boating activities, fishing will likely be the primary driver for growth in recreation activity at Wells Reservoir as it was clearly the most popular reason for visiting the reservoir at nearly one-third of visitors surveyed in 2005. The motor boating activities of water skiing and wakeboarding accounted for less than 10 percent of the visitors surveyed in 2005; however, increases in these types of motorized water-based activities bear close examination due to their higher level of visibility, noise dispersion and impact on perceived crowding at reservoirs, especially in comparison to fishing. As a result, increases in high-powered motorized boating related activities (especially water skiing and wakeboarding) would likely have greater effects on physical capacity and social capacity as use increases over the term of the new license. Future recreation trends, such as an increased interest in non-motorized recreation such as sea kayaking, and the advent of a water trail, may temper this growth. Further, it is possible that increased fuel prices will have a major impact on motorized recreation use, including fishing, overall. Additionally, with the push for healthier lifestyles and the increased interest in walking/hiking, there is likely to be continued growth in these types of activities. Presently, the Wells Project provides ½ mile of waterfront trail. Identifying appropriate areas to expand opportunities for this activity may be considered in development of the Recreation Management Plan, due to the current number of participants, latent demand within the state, and interest in the activity.

Parking use at various recreation facilities is typically low to moderate and likely won't approach full capacity for the foreseeable future, except potentially on holiday weekends, occasional weekend days, or special events.

7.3.1 Summary of Hispanic Recreation Management

Overall, Hispanics are looking for recreation opportunities that allow for larger group activities in a natural setting that provide modest levels of facility development. As a result, managers should consider facilities that accommodate larger groups such as providing tables with additional seating, simple permit systems for organized group events, and safe and clean access to restrooms.

Water-based activities and picnicking are also highly important to Hispanics and most indicate they concentrate their activities near lakeshores and alongside creeks during trips to parks and forests. Therefore, managers should focus on recreation opportunities near bodies of water.

Providing Hispanics with recreation information is often difficult due to potential language barriers and their preference for obtaining information from family or friends. Therefore, print media such as maps and brochures may be the most effective means of communicating with

Hispanic recreationists. Needs identified by community members included signage and general communication in Spanish. In addition, Hispanics may be more sensitive to fees and may get priced out of the recreation market (Bowker & Leeworthy, 1998). Therefore, managers should consider reducing the use of recreation fees or identify thresholds where fees may become a constraint to participation.

7.4 Regional Uniqueness

Overall, the Wells Project reservoir offers very similar recreational opportunities to other reservoirs in the Wells Project vicinity. The regional analysis focuses on recreation facilities both within the Mid-Columbia region (including Douglas, Chelan and Grant County PUD facilities), as well as other water-based recreation facilities within an approximately 60-mile radius of the Wells Project Area.

At the Wells Project, the primary activities are fishing, boating, swimming, camping, picnicking, and hiking. When comparing these activities to other reservoirs and lakes in the area, these same types of recreational activities are available. In fact, many of the other reservoirs and lakes in the region share the same list of primary activities that are provided for in the Wells Project area.

With crowding identified as one of the constraints to visiting outdoor recreation areas in the state, one of the unique features is the low use level on Wells Reservoir. The experience provided is still one where visitors can experience solitude and relatively low use for fishing, boating, wildlife viewing, and boating activities. Un-crowded qualities of the area provide a basis for expanding new types of non-motorized recreational opportunities such as sea kayaking and wildlife viewing/sightseeing, which appear to be growth areas.

8.0 ACTIONS TO ADDRESS PROJECT RELATED ISSUES

Actions to address Wells Project-related recreation issues were developed for consideration in the development of a Recreation Management Plan that includes measures to be incorporated into the draft license application for the Wells Project. Effectiveness, feasibility, and costs are described to help in prioritizing these actions. However, development of the measures proposed herein will require feasibility analyses to identify the most appropriate and cost-effective measures for accommodating recreational needs. Costs related to facility upgrades, operations and maintenance, and construction of new facilities should be evaluated as part of the development of the Recreation Management Plan.

8.1 Public Project Recreation Information

To enhance educational and interpretive information at Project facilities, and to address issues that have been noted relative to language barriers, the following actions are proposed.

Improve Signage at Recreation Resource Areas

One potential action is to install consistent, highly visible signage at Wells Project recreation and access sites with maps and information on matters relative to safety, littering, and water trail access (when appropriate). Additionally, these maps can show the location of various public access areas. Signage translations to Spanish should be considered.

a. Effectiveness: The action would provide visitors to major Project recreation sites with adequate Project information to discern which resources are available to them for a variety of recreational activities; and to discourage littering and encourage safety when participating in project related recreation activities.

b. Appropriateness: Providing publicly available signage for visitors is a common management tool at most designated recreational areas. This recommended action was identified by a range of stakeholders and Project users (i.e., visitors, community members, and participants in the Recreation RWG and focus groups).

c. Public Acceptability: Based on the level of stakeholder comment and support in visitor and community surveys as well as focus groups, it is likely that this action will be accepted by the majority of the public.

d. Feasibility and Cost: This proposed action is logistically feasible and similar to on-going work Douglas PUD already implements at public recreation sites within the Wells Project. This proposed action will likely reduce user conflicts. The costs of additional signage will be relatively small and may be made up through reduced costs associated with environmental and facility clean-up.

Improve Access for the Columbia River Water Trail

By providing access and potential enhancements to the proposed water trail concept, boaters, anglers, and river recreationists may utilize the Project's flat water boating resource as part of a larger interconnected water trail. The Water Trails Coalition identified the following issues that could be considered toward connecting the Wells Pool to the water trail, consistent with other sections of the Columbia River:

- Assess that public access points to the water trail from a road are no more than 20 miles apart.
- Assess that public access points from the water for both up-and-down stream travel are no more than 10 miles apart.
- Work with the Coalition to provide educational information on dangers or hazards.

- Assist with marking portages around dams and major navigational obstructions.
- Assist with adding marked and coded signs easily visible from the river and contain the Greater Columbia Water Trail (GCWT) Logo.
- Evaluate day-use sites for the provision for safe haul out and entry of non-motorized craft (i.e., sea kayaks).
- Mark and provide safe haul out and entry, an area for tent site, and a maintained toilet facility at camping sites.

a. Effectiveness: To be effective, Douglas PUD would work with key stakeholders within the Water Trails Coalition to address issues related to connecting the Wells Reservoir to the water trail, consistent with other sections of the Columbia River:

b. Appropriateness: Based on the types of activities taking place on the Wells Reservoir and the potential increased interest in paddle sports, these actions have a high level of appropriateness, with the GCWT gaining support overall.

c. Public Acceptability: Based on the level of support in the visitor and community surveys as well as focus groups, it is likely this action will be accepted by the majority of the public and stakeholders.

d. Feasibility and Cost: The degree to which this action is feasible would depend on site selection, the specific outcomes of the assessments and tasks outlined above. However, it does appear there are places where it is feasible to allow camping and to provide additional signage. There would likely be moderate improvement costs for Douglas PUD's action related to this project, including signage and information, and shoreline boat-in tent camping facilities.

Increase Access to Wildlife Viewing and Hiking

This action includes adding a trail or trails to provide space for bird watching and wildlife viewing. Potential exists for this opportunity at Douglas PUD's designated wildlife areas around the reservoir. Wildlife viewing trails also increase opportunities to fish and hike near the shoreline. This action is consistent with growing interest in wildlife viewing and sightseeing identified in the WA SCORP and visitor surveys, as well as increases hiking/walking opportunities and shoreline fishing within the Project.

a. Effectiveness: Placing a shoreline trail within one of the designated wildlife areas effectively addresses the need to provide places for wildlife viewing, shoreline fishing, and hiking.

b. Appropriateness: Based on trends in wildlife viewing and growing interest in birding and issues raised through the Washington SCORP, increased access to hiking and wildlife viewing would be an option that the public would likely consider appropriate. Site selection would be important to reduce user conflicts such as hunting.

c. Public Acceptability: Based on the level of support in the visitor survey as well as focus groups, it is likely this action will be accepted by the majority of public and stakeholders.

d. Feasibility and Cost: This action is feasible provided that conflicts with existing designated uses of the wildlife areas can be addressed. Site selection will be critical to minimizing conflicts and costs. Improvements to existing roads and trails should be considered and evaluated first prior to pursuing the addition of any new trails for wildlife viewing and hiking. Costs for establishing designated trails in areas with existing roads or informal trails would be moderate and higher in areas where no developments currently exist.

8.2 Improve Existing Facilities and Opportunities

Replace and Rehabilitate Existing Recreation Facilities

Facility assessments and visitor surveys identified a need to upgrade some facilities to provide quality experience for recreation users over the term of the new license. Upgrades identified include the need to provide adequate ADA compliant recreation opportunities at some of the developed facilities (for specific details for each site, see Section 6.4). A possible action would be to identify and develop a schedule of replacement/rehabilitation of developed facilities based on facility life expectancy. In addition, this schedule should also identify where and what types of ADA facility enhancements are currently necessary to provide sufficient ADA access to recreation on the Project.

a. Effectiveness: Improving or upgrading the existing facilities to be consistent with ADA requirements will ensure that future recreation visitors will have access to the primary Project related recreation facility. These enhancements will also allow disabled persons to participate in the primary activities at the Wells Project recreation sites.

b. Appropriateness: Because facilities are generally described as "developed" facilities, these types of upgrades are appropriate for the recreation settings of each area identified; and the accessibility enhancements are necessary to meet the current ADA accessibility standards for recreation facilities.

c. Public Acceptability: Based on the level of support in the Recreation RWG, visitor and community surveys as well as by certain focus groups, it is likely this action will be accepted by the majority of the public.

d. Feasibility and Cost: This action is feasible and will be costly for Douglas PUD; however, the cost of implementing such upgrades is dependent upon the types of upgrades and can vary greatly depending upon the types of materials and level of amenities required or selected for upgrade.

Improve Access at Boat Launches

Facility assessments and visitor surveys identified a need to upgrade some boat launches. These improvements are being addressed in the Public Access Study and as part of Douglas PUD's 2007 Recreation Action Plan Update– 2007.

8.3 Recreation Use Monitoring

Form 80 Recreation Use Monitoring Every Six Years during the License Period

Douglas PUD is required by FERC Form 80 regulations to monitor and report Project recreation use and facility capacity every six years to FERC. This monitoring program assesses whether Project recreation use at each Project recreation facility has stabilized, is growing or declining. Also, the assessment will help determine if recreation facilities are approaching or have exceeded their carrying capacities. Sites identified as being at or near capacity may trigger appropriate management actions to address problems with crowding as they arise throughout the new license period.

a. Effectiveness: The monitoring data provided by the Form 80 process will effectively provide a pattern of use that will determine what, if any, management direction is needed at Project recreation facilities.

b. Appropriateness: This proposed action is appropriate for Douglas PUD, and minimally impacts visitor experience.

c. Public Acceptability: It is unlikely that this monitoring will impact the visitor experience, with the exception of improving the quality of their overall recreational experience.

d. Feasibility and Cost: This action is feasible and is currently a part of Douglas PUD's Wells Project license requirements. The intensity of monitoring may vary during each six-year cycle. Costs for recreation monitoring are generally low to moderate, and will depend on the frequency and level of survey required. The recreation management plan should specify the level of monitoring required during each Form 80 cycle.

9.0 STUDY VARIANCE

There were no variances from the FERC approved study plan for the Recreational Needs Analysis.

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Appendix A

Literature Review of Hispanic Recreation Needs

HISPANIC RECREATION NEEDS

Overview of Recreation Style

Researchers anticipate a 40 to 50 percent increase in Hispanic participation in major outdoor recreation activities through the year 2025 (Thapa, Graefe, & Absher, 2002). Therefore, it will be important for managers to understand the recreation style, expectations, and activity preferences of Hispanic participants in order to provide quality experiences for this user group. Because Hispanics primarily recreate with larger family groups, they place high value on the social qualities of participating in outdoor recreation that help promote family cohesiveness (Chavez, 2000; Gobster, 2002; Shaull & Gramann, 1998; Virden & Walker, 1999). In fact, studies have shown that Hispanics are more likely to recreate with immediate and extended family than with friends and often travel in groups of three or more (Sasidharan, Willits, & Godbey, 2005; Virden & Walker, 1999). As a result, managers should provide opportunities that accommodate larger groups such as providing tables with additional seating, simple permit systems for organized group events, and safe clean access to restrooms (Gobster, 2002).

Activity Participation

When selecting locations to recreate, Hispanics place greater emphasis on scenery, open space, trees, water, nature, and fresh air (Gobster, 2002). As a result, Hispanics spend more time visiting parks and forests and participate in a wide variety of outdoor activities (Sasidharan, Willits, & Godbey, 2005; Thapa, Graefe, & Absher, 2002). High participation rates have been observed in fishing, hiking, camping, and orv/atv driving (Sasidharan, Willits, & Godbey, 2005). However, water-based activities, such as swimming, are also highly important to Hispanics and most indicate they concentrate their activities near lakeshores and alongside creeks during trips to parks and forests (Gobster, 2002; Sasidharan, Willits, & Godbey, 2005). Because food is symbolic to Hispanic culture, picnicking is often engaged in when visiting parks, forests, and recreational areas (Sasidharan, Willits, & Godbey, 2005). Therefore, Hispanics are more likely to use outdoor cooking facilities such as picnic tables, pavilions, and grills (Gobster, 2002; Sasidharan, Willits, & Godbey, 2005). Other common activities among Hispanics, more so at urban parks, are watching and playing organized team sports (Gobster, 2002; Sasidharan, Willits, & Godbey, 2005). While these are the most common outdoor activities, Hispanics have also shown interest in participating in activities associated with wilderness such as horseback riding, photography, and natural history hiking (Chavez, 2000). Because Hispanics participate in a wide variety of activities, managers should focus on providing more opportunities to hike, camp, picnic, and participate in recreation near bodies of water (Sasidharan, Willits, & Godbey, 2005).

Facility Development

Although Hispanics prefer to recreate in more natural settings, there are expectations for some level of facility development (Gramann, 1996; Virden & Walker, 1999). For example, they prefer locations with restrooms, camping space at each site, picnic tables, signs, trails, parking spaces, water, and fire rings (Bass, Ewert, & Chavez, 1993; Irwin, Gartner, & Phelps, 1990). In fact, when asked to identify problems with recreation areas, Hispanics often note the condition of restrooms and lack of facilities (Gobster; 2002). Therefore, managers should consider providing

some level of facility development that meets the needs of Hispanic recreationists while maintaining natural settings.

Recreation Information

Providing Hispanics with recreation information is often difficult due to potential language barriers (Thapa, Graefe, & Absher, 2002). Studies show that Hispanics prefer to obtain information from family or friends and are less likely to approach park rangers and managers about recreation opportunities (Thapa, Graefe, & Absher, 2002). While some research has shown a desire among Hispanics for increased interaction with park and forest personnel, with the exception of law enforcement, they may be hesitant to do so because of language barriers and previous negative interactions with others (Virden & Walker, 1999). As a result, when obtaining information from a park or forest directly, Hispanics prefer print media such as maps and brochures (Thapa, Graefe, & Absher, 2002). To better serve Hispanic users, managers should print material in Spanish and hire Hispanic employees to help reach this population (Thapa, Graefe, & Absher, 2002). Based on Hispanic interests and expectations about recreation experiences, studies suggest that information should focus on instrumental information such as parking facilities, permits, and educational information (Chavez, Winter, & Mainieri, 1995; Thapa, Graefe, & Absher, 2002).

Constraints to Participation

While information availability and access may be an issue for Hispanic populations, researchers have identified other constraints to participation. For example, Hispanics tend to live farther from parks and forests resulting in limited physical access to areas for outdoor recreation (Gobster, 2002). Another, more pertinent issue to current Hispanic users is entrance fees. Research has shown that Hispanics are more sensitive to fees and may get priced out of the recreation market (Bowker & Leeworthy, 1998). Therefore it will be important for managers to reduce the use of recreation fees or identify thresholds where fees may become a constraint to participation.

Cultural Differences

Although commonalities exist among Hispanics as a whole, differences in recreation participation behavior, site use, and perceptions of nature were attributed to origination and level of acculturation, or length of residence in the U.S. (Carr and Williams, 1993; Sasidharan, Willits, & Godbey, 2005). Likewise, Li et al., (2007) suggest that not all members of the same ethnic background behave in the same way and therefore recreation behavior is likely to differ. A study by Carr & Williams (1993) showed that differences existed in Hispanic values associated with nature. For example, when asked what the phrase “respecting the forest” meant, Hispanics born in the U.S. interpreted this as not littering, vandalizing, or having fires while those born outside the U.S. interpreted it as having clean air and water, a place to relax, and a safe place to visit (Carr & Williams, 1993).

While family-related recreation benefits are rated as highly important among all Hispanics, they were found to be the most important to less acculturated and bicultural Hispanics (Sasidharan,

Willits, & Godbey, 2005). Likewise, Hispanics born outside the U.S. are more likely to recreate in organized groups (Virden & Walker, 1999). Hispanics also differed in selecting sites where they recreated. More second generation Hispanics were found at sites where Whites were the majority while sites with equal Whites and Hispanics had more immigrant Hispanics (Carr & Williams, 1993; Sasidharan, Willits, & Godbey, 2005). Floyd and Gramann (1993) found highly acculturated Mexican Americans were similar to Whites in the number and type of activities they participated in. However, other studies have noted several differences among Central Americans, Mexicans, and Puerto Ricans. For example, Gobster (2002) found that Central Americans participated more in soccer, while Mexicans had higher rates of picnicking, and Puerto Ricans spent more time playing basketball and swimming.

Overall, Hispanics are looking for recreation opportunities that allow for larger group activities in a natural setting that provide modest levels of facility development. In addition, the diversity that exists within Hispanic outdoor recreation participation will challenge managers to provide quality recreation experiences that meet the needs of different ethnicities within the culture.

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Appendix B

Accessibility Evaluation Form

Site Condition Evaluation Criteria and Rating System

Variable	Points		
	0	1	2
	Poor	Fair	Good
Roads & Parking (circulation and condition of surface paving)	All surfaces are in disrepair and need of immediate reconditioning or replacement. Current conditions create safety hazards.	Need for improved maintenance and repair in some areas. No major safety concerns.	All surfaces in excellent condition and well maintained. No rehabilitation required within the next 5-10 years.
Recreation Site Amenities (condition of spur, picnic tables, fire ring/grills, and boat ramps)	Facilities require immediate repair or replacement. Little evidence of recent maintenance.	Some facilities damaged or in need of replacement. Could be accommodated through routine maintenance.	Facilities generally in good condition and well maintained.
Recreation Site Buildings (condition of restrooms, maintenance buildings, and othe structures)	Structures in disrepair requiring immediate attention. Significant rehabilitation likley. Problems could include rot, leaks, and sagging roofs.	Some structures need minor repairs, such as painting or replacement of roof/shingles. Repairs should be made, but are not needed immediately.	All structures appear in sound, well maintained condition. No significant problems observed.
Signs (presence/condition of project and recreation signs)	Signs do not exist or require immediate repair or replacement.	Some signs damaged or in need of replacement.	Signs generally in good condition and well maintained.
ADA Compliance (presence of accessible facilities and other FSORAG/ABA factors)	Little or no consideration for handicap accessibility. Clearly not in compliance with FSORAG/ABA standards.	Some handicap facilities, but in disrepair or not up to current standards (e.g., slopes too steep, docks inaccessible, etc.)	High quality of accessibility. Facilities appear fully consistent with current FSORAG/ABA standards.

Overall Condition Evaluation Score

Total Score	Evaluation
10	Excellent condition
7 to 9	Good condition requiring routine care
4 to 6	Fair condition, may require some rehabilitation
< 4	Poor condition, like to require immediate rehabilitation work.

DEVELOPED RECREATION FACILITY INVENTORY AND CONDITION EVALUATION FORM

Date: _ Facility Name: _____ Location: _____

Surveyor: _____ Site Type: *Campground / Day Use / Boat Launch / Other:* _____

A. SITE AMENITIES

Type of Amenity		#	ADA	Condition	Comments
Campground	Standard campsite			G / F / P	
	RV campsite			G / F / P	
	Hike-in/tent site			G / F / P	
	Vehicle spur			G / F / P	
	Picnic table			G / F / P	
	Fire ring			G / F / P	
	Cooking grill			G / F / P	
	Tent pad			G / F / P	
	Food locker			G / F / P	
	Water spigot			G / F / P	
Picnic Area	Picnic table			G / F / P	
	Cooking grill			G / F / P	
	Food locker			G / F / P	
	Water spigot			G / F / P	
	Water fountain			G / F / P	
Restroom	Type (Pit/Vault/Flush)			G / F / P	
	Stalls/unit			G / F / P	
	Sink			G / F / P	
Boat Launch	Launch ramp			G / F / P	
	Dock/Pier			G / F / P	
				G / F / P	
Other	Trash Receptacles			G / F / P	
				G / F / P	
				G / F / P	
				G / F / P	

B. ROADS, PARKING AND SIGNS

PARKING	Total Spaces: _____ Std: _____ ADA: _____ Van ADA: _____ Double: _____ Overflow: _____	Condition
	Surface Type: *Asphalt Concrete Gravel Other:*_____	G / F / P
	Barrier Type: *None Curb Boulder Wood post Log Other:*_____	G / F / P

ROADS	Road Type: *Loop Semi-loop In-Out Other:*_____	Condition
	Surface Type: *Asphalt Concrete Gravel Other:*_____	G / F / P
	Barrier Type: *None Curb Boulder Wood post Log Other:*_____	G / F / P

Signs	#	Size	Material	Condition	Comments
FERC Project			wood / metal / other	G / F / P	
Facility ID			wood / metal / other	G / F / P	
Regulations			wood / metal / other	G / F / P	
Directional			wood / metal / other	G / F / P	
Interpretive			wood / metal / other	G / F / P	

C. SITE LAYOUT/SCHEMATIC

Component	Score (0 – 2)	Comments
Roads/Parking		
Buildings		
Signs		
Amenities		
Accessibility		
OVERALL		

D. SITE CONDITION EVALUATION

E. COMMENTS/OBSERVATIONS

SECTION A – FOR ALL RECREATION SITES		
VARIABLE NAME	QUESTION	RESPONSE CHOICES
ID Number	Identification number	
Name	Name of the site	
Resource Area	Which resource area is site located in?	
Litter	In general, how much litter is found at this site?	1. Trace amounts: less than a handful or none 2. Small: about a handful 3. Medium: about a bucketful 4. Large: about a 33 gallon garbage bag full 5. Excessive: over one garbage bag full
Dump	Does this site get used as a dump (not just litter from camping)?	1. No, rarely 2. Yes, sometimes (large items such as cars, beds, etc. in evidence)
Tree cutting	Does the site show signs of tree cutting for firewood?	1. Low: few signs 2. Medium: some signs, especially lower branches of live trees 3. High: many signs, including excessive cutting of live trees
Access Barriers	Are there management- placed barriers to prevent vehicle access to parts of the site & have people moved the barriers?	1. No barriers placed there 2. Barriers there & have not been moved 3. Barriers have been moved
Fire rings/ vegetation clearances	How many fires rings do not have appropriate vegetation clearing?	Report # of fire rings that to do not have 8 to 10 feet vertical & 5 feet horizontal vegetation clearance:
Vegetation	What is dominant vegetation type at site?	Report % vegetation types: Forest_____ Meadow_____ Riparian_____ Other_____
Soil	What is the dominant soil type at the site?	Report the % of soil type: Sandy____Clay_____Rock_____Other_____ Comment on drainage:
Shade	Does the site have good shade from rocks or trees?	1. Low: few trees or rocks with shade 2. Medium: some shade trees/rocks for some parts of the day 3. High: many trees/rocks that offer shade through entire day.
Screening	Does the site screen groups from each other?	0. Not applicable: single site (not cluster) 1. Low: virtually no screening between sites 2. Medium: some screening 3. High: extensive screening
Reservoir views	Does the site have views of the reservoir?	1. Poor or no views. 2. Some views, but not high quality 3. High quality views.
Landscape views	Does the site offer views of the surrounding landscape?	1. Poor or no views. 2. Some views, but not high quality 3. High quality views.
Reservoir proximity	Is the site on or off the reservoir?	1. < 100 feet 2. 100 to 200 feet 3. > 200 feet
Reservoir accessibility	Is the reservoir easy to access from the site?	1. Easy: <20' above reservoir, obvious trail, shorter trail (<100'), not too steep. 2. Medium difficulty: over 20' above reservoir less obvious trail, narrower trail, some switchbacks, some scrambling over talus, some poison oak. 3. Hard: >200' above reservoir; less obvious trail; extensive scrambling; poison oak
Creeks	Is the site close to other creeks or springs?	1. < 100 feet 2. 100 to 200 feet 3. > 200 feet
Hiking Trail Type	Is the trail developed or user-created?	1. Developed trail 2. User-created trail
Hiking Trail Lengths	Length of trail (feet)?	
ORV	Does the site show signs of nearby ORV use?	1. No 2. Yes
Bare ground	Does the site show signs of extensive use & loss of ground vegetation?	1. Low: small areas around fire rings & tent sites 2. Medium: large areas around fire rings & tent sites 3. Large: large contiguous areas & multiple trails to satellite use areas
Tent availability	Does the site have good places for tents?	1. Poor: few, small, low quality 2. Fair: more than one, better quality 3. Good: more than two sites with flat, unbrushy areas
White Flowers	# of "White Flowers" present (toilet paper)?	

SECTION B – FOR DISPERSED SITES ONLY		
VARIABLE NAME	QUESTION	RESPONSE CHOICES
Site Type	What type of site is it?	1. Single site 2. Cluster site : Max. No. Groups_____Typical No. Groups_____
Use	Is the site currently used?	1. Yes, but rarely 2. Commonly used
Access	Is the site primarily accessible by the road, a trail, or by the reservoir?	1. Road (within 50 feet) 2. Trail from road (and reservoir) 3. From the reservoir
Existing parking spaces	How many vehicle places are available at the site (or at access to the site)?	# Report the # of obviously used parking places if those are distinct. 97 - Report 97 there are indistinct areas that could accommodate less than 7 vehicles 98 - Report 98 if an indistinct area could accommodate more than 7 99 - Report 99 if there is no parking associated with the site or you don't know.
Squatter Use	Is the site used for long term camping (over 14 days at one time)?	1. Rarely or never used by squatters 2. Occasionally used by squatters 3. Commonly used by squatters
Existing camp use	How many parties appear to be able to use the site at one time?	Report # of fire rings that appear separate but "active" in a cluster. Report 1 if the site is a single site.

Use Impact Area (North-South x East-West):

Comments (i.e. user impacts, sensitive areas, general observations, etc.):

Site Diagram:

Appendix C

Representative Photographs of the Wells Project Recreation Facilities and Sites

Attachment C - Representative Photographs of Wells Project Recreation Facilities & Sites

(Photographs taken late March/early April 2008 unless otherwise noted)

MARINA PARK (CITY OF BRIDGEPORT)

RV campsite

Concrete boat launch ramp (one lane)

Swimming lagoon

Picnic shelter & restroom

CHICKEN CREEK BOAT LAUNCH

Concrete boat launch ramp (one lane)

Gravel parking area

Restroom unit

Reservoir regulation & warning signs

CASSIMER BAR FISHING ACCESS

Gravel parking area & shoreline access

Gravel parking area

Restroom unit

Gravel access road

OKANOGAN RIVER INFORMAL LAUNCH – SITE No. 1

Informal launch ramp

End of launch ramp

OKANOGAN RIVER INFORMAL LAUNCH – SITE No. 2

Informal launch ramp

Reservoir regulation & warning signs

MONSE BOAT LAUNCH

Launch ramp & parking area

Gravel parking area

Restroom unit

Concrete boat launch ramp (one lane)

COLUMBIA COVE PARK (CITY OF BREWSTER)

Playground & picnic areas

Picnic shelter

Swimming beach

Boat handling dock

Attachment C - Representative Photographs of Project Recreation Facilities & Sites

(Photographs taken late March/early April 2008 unless otherwise noted)

BREWSTER WATERFRONT TRAIL

Trail access signage & bench

Section of trail along shoreline

Bench at trail access location

Section of trail with bench

INFORMAL BOAT LAUNCH	
	
Informal shoreline launch area	**Informal parking area**

MEMORIAL PARK

Park overview with playground and paved path

Picnic shelter

Restroom unit

Boat handling dock

METHOW BOAT LAUNCH (CITY OF PATEROS)

Boat launch ramp & handling dock

Parking area & paved path entering facility

WINTER BOAT LAUNCH (CITY OF PATEROS)

Boat launch ramp & handling dock

Lawn area & handling dock

METHOW FISHING ACCESS - SITE No. 1 (CITY OF PATEROS)

Gravel parking & shoreline access area

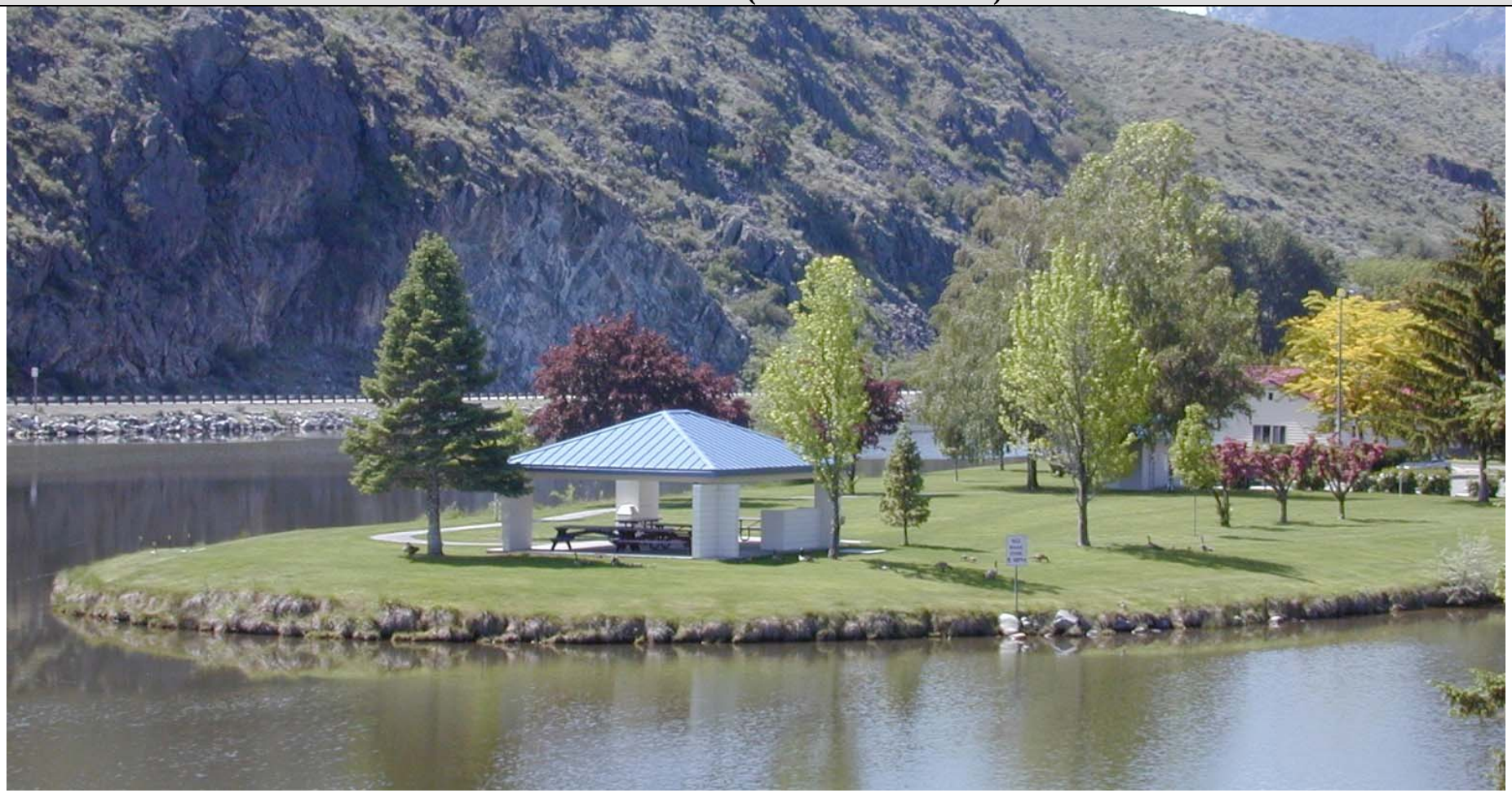
Shoreline access location

METHOW FISHING ACCESS - SITE No. 2 (CITY OF PATEROS)

Gravel parking area

Restroom unit

PENINSULA PARK (CITY OF PATEROS)



Panorama with picnic shelter & trail in the foreground

RIVERSIDE DRIVE RECREATIONAL ACCESS (CITY OF PATEROS)	
	
Paved parking area, picnic shelter & restroom unit	**Shoreline access area**

WELLS DAM OVERLOOK

Interpretive walk in foreground; picnic area in background

Interpretive panels on Columbia River & hydropower history

Original turbine runner (circa 1960s)

Rock with pictograph (excavated from river near Wells Dam, 1967)

Attachment C - Representative Photographs of Project Recreation Facilities & Sites

(Photographs taken late March/early April 2008 unless otherwise noted)

STARR BOAT LAUNCH

Concrete boat launch ramp (two lanes)

Restroom unit

CARPENTER ISLAND BOAT LAUNCH

Concrete boat launch ramp (one lane)

Gravel parking area

Appendix D

Community Surveys Utilized for Brewster, Bridgeport and Pateros

Wells Project Recreation Area Community Resident Survey

1. **What recreational activities do you enjoy at the Wells Project Recreation Area?**
    a. Hiking
    b. Biking
    c. Fishing
    d. Camping
    e. Swimming
    f. Paddling (type?):
    g. Boating (type?):
    h. Other? Please list:

2. **Do you have any comments regarding the recreation activities you enjoy at the Wells Project Recreation Area?**

3. **Please rate the overall access quality for the activities you enjoy at the Wells Project Area:**

    1 Totally unacceptable
    2 Slightly unacceptable
    3 Marginal
    4 Slightly acceptable
    5 Totally acceptable
    0 Other (please write out)

    a. If you rated the above 'marginal' to 'totally unacceptable', please explain your answer and your suggestions for improvement.

4. **Do you fish on the Wells Project? YES / NO If you do like to fish, where do you like to fish?**

5. **If you fish on the Wells Reservoir, do you have any comments regarding your fishing experience(s) in the Wells Project Recreation Area?**

6. **Please think about your visits to the Wells Project Recreation Area when answering the following questions.**

   1st Step-What facilities did you use or visit?

   2nd Step-On a scale of **1 to 10**, rate your level of satisfaction with the facilities you used during your visit, with a rating of 10 being completely satisfied with the facilities, and a rating of 1 being totally dissatisfied with the facilities.

   3rd Step-Provide any suggestions for changes/improvements

Project Area:	**√ Facilities Used/Visited**	**Rating 1-10**	**Suggested Changes or Improvements**
RV campground			Where?
Boat ramp			Where?
Overlook			Where?
Playground			Where?
Trail			Where?
Wells Dam Overlook			
Fishing dock			Where?
Wildlife area			Where?
Other:			
Other:			

7. **Do you feel that more controls are needed to prevent conflicts from occurring between recreation users?**

   - ❑ No
   - ❑ Yes-If yes, what conflicts occur and how should they be managed?

8. **Do you feel that more controls are needed to prevent damage to the environment by visitors to the Wells Project Recreation Area?**

   - ❑ No
   - ❑ Yes-If yes, what kinds of environmental damage have you seen, where have you witnessed this damage, and how should use be controlled?

9. Are there certain activities or services that should be offered at the Wells Project Recreation Area that currently are not available?

- ❑ No
- ❑ Yes-If yes, what kinds of activities or services?_____

10. Are there any additions, improvements or changes that you would like to see at the Wells Project Recreation Area?

- ❑ No
- ❑ Yes. Please list changes and areas for these changes.-_____

_____

11. Are the directional and information signs provided within the Wells Project Recreation Area adequate?

- ❑ Yes
- ❑ No. If no, what do you feel is needed to assist you further?_____

_____

12. Are there enough educational/interpretive opportunities at the Wells Project Recreation Area?

- ❑ Not applicable (e.g., "do not know," "do not care," etc.)
- ❑ Yes
- ❑ No. If no, what would you like to see?_____

13. Do you feel you have adequate access to information about the Area?

- ❑ Not applicable (e.g., "do not know", "do not care", etc.)
- ❑ Yes
- ❑ No-If no, what suggestions do you have for improvement?_____

14. Are there any locations on the Wells Reservoir or in the Project Area you deliberately avoid?

- ❑ No
- ❑ Yes-If yes, name of location(s): _____

a. Why do you avoid these places? _____

15. Are there any places on the Wells Reservoir/in the Project area where you feel unsafe?

- ❑ No
- ❑ Yes-If yes, name of location(s):_____

a. Why do you feel unsafe?

16. Please identify if you experience any constraints or barriers to angling at the Wells Project.

a. If you do experience constraints or barriers to angling at the Wells Project, do you have any solutions to these constraints or barriers experienced?

17. Please rate the overall access quality for angling at the Wells Project Area:

1 Totally unacceptable

2 Slightly unacceptable

3 Marginal

4 Slightly acceptable

5 Totally acceptable

0 Other (please write out)

a. If you rated the above 'marginal' to 'totally unacceptable', please explain your answer and your suggestions for improvement.

18. Please give your opinion or thoughts on any other management issues such as crowding, facility needs, safety, etc.

ADDITIONAL COMMENTS?

You have the chance to share additional comments you have for improving or maintaining the Wells Project Recreation Area. **Please feel free to share your thoughts below.**

Thank you for completing this survey!

Encuesta de la Comunidad Sobre el Área de Recreacion de el Proyecto de Wells

1. ¿Cuales son las actividades recreativas que le gusta disfrutar en el Área de el Proyecto de Wells?

   - ☐ Senderismo
   - ☐ Ciclismo
   - ☐ Pesca
   - ☐ Acampar
   - ☐ Natación
   - ☐ Remando (¿Qué tipo?):
   - ☐ Náutica (¿Qué tipo?):
   - ☐ Otros? Por favor indique:

2. ¿Tiene algún comentario con respecto a las actividades recreativas que disfruta en el Área de el Proyecto de Wells?

3. Por favor califique la calidad general de acceso a las actividades que disfruta en el Área de el Proyecto de Wells:

   1 Totalmente inaceptable

   2 Algo inaceptable

   3 Marginal

   4 Algo aceptable

   5 Totalmente aceptable

   0 Otro? (Por favor explique)

Si su calificacion anterior es de ‘marginal’ a ‘totalmente inaceptable,’ por favor explique su respuesta y sus sugerencias de mejoria.

4. ¿Le gusta pescar en el Proyecto de Wells? SI / NO Si le gusta la pesca, ¿dónde le gusta pescar?

5. Si usted pesca en la Reserva Wells, ¿tiene algún comentario con respecto a su experiencia/s con la pesca en el Área de el Proyecto de Wells?

6. Por favor, piense acerca de sus visitas a la Zona de Recreacion en el Proyecto de Wells al responder las siguientes preguntas.

   1. ¿Qué instalaciones usó o visitó?

   2. En una escala de 1 a 10, califique su nivel de satisfacción con las instalaciones que ha utilizado durante su visita, con una puntuación de 10 están completamente satisfecho con las instalaciones, y una calificación de 1 estar totalmente insatisfecho con las instalaciones.

   3. Proporcione sus sugerencias para cambios o mejorias

Área del Proyecto	**√ Instalaciones utilizadas/ visitadas**	**Calificacion 1-10**	**Sugerencias de cambios o mejorias**
Campamento de Vehículo Recreativo (RV)			¿Donde?
Rampa para botes			¿Donde?
Vistas			¿Donde?
Juegos			¿Donde?
Senda			¿Donde?
Vistas de Wells Dam			
Muelle de pescar			¿Donde?
Área de vida silvestre			¿Donde?
Otros:			
Otros:			

7. ¿Tiene la sensación de que se necesitan más controles para evitar que se produzcan conflictos entre los usuarios de la recreación?

   ☐ No
   ☐ Sí-En caso afirmativo, ¿qué conflictos se producen y cómo deberían gestionarse?

8. ¿Tiene la sensación de que se necesitan más controles para evitar daños al medio ambiente por los visitantes a la Zona de Recreación de el Proyecto de Wells?

   ☐ No
   ☐ Sí-En caso afirmativo, ¿qué tipo de daños ambientales que ha visto, dónde ha sido testigo de este daño, y cómo debe ser el uso controlado?

9. ¿Hay ciertas actividades o servicios que deban ofrecerse en la Zona de Recreación de el Proyecto de Wells que en la actualidad no se disponen?

☐ No
☐ Sí. En caso afirmativo, ¿qué tipo de actividades o servicios? _____

_____

10. ¿Hay algunas adiciones, mejorias o cambios que le gustaría ver en El Área de Recreación en el Proyecto de Wells?

☐ No
☐ Si. Por favor, indique los cambios y las zonas para estos cambios. _____

_____

11. ¿Son las señales direccionales e informativas proporcionadas dentro la Zona de Recreación en el Proyecto de Wells adecuadas?

☐ Yes
☐ No. En caso negativo, ¿qué se necesita para más ayuda? _____

_____

12. ¿Hay suficiente opportunidades educativas/informativas en la Zona de Recreación en el Proyecto de Wells?

☐ No se aplica (por ejemplo, "no lo sé", "no les importa", etc)
☐ Si
☐ No. En caso negativo, ¿qué le gustaría ver? _____

13. ¿Considera que tiene un acceso adecuado a la información sobre la Zona?

☐ No se aplica (por ejemplo, "no lo sé", "no les importa", etc)
☐ Si
☐ No. En caso negativo, ¿qué sugerencias tiene usted para mejorar? _____

14. ¿Existen lugares en la Reserva Wells o en el Área del Proyecto que usted deliberadamente evita?

☐ No
☐ Si. En caso afirmativo, nombre de lugar/es: _____

a. ¿Por qué evita estos lugares?_____

15. ¿Existen lugares de la Reserva Wells / Area del Proyecto en la que usted se siente inseguro?

☐ No
☐ Si. En caso afirmativo, nombre de lugar/es: _____

a. ¿Por qué se siente inseguro?_____

16. Por favor, identifique si tiene limitaciones o barreras a la pesca en el Proyecto Wells.

    a. En caso de experimentar dificultades o barreras a la pesca en el Proyecto Wells, ¿tiene alguna solución a estas limitaciones o barreras experimentadas?

17. Por favor califique la calidad general de acceso para la pesca en el Área del Proyecto Wells:

    1 Totalmente inaceptable

    2 Algo inaceptable

    3 Marginal

    4 Algo aceptable

    5 Totalmente aceptable

    0 Otros (Por favor indique)

    a. Si su calificacion anterior es de “marginal” a “totalmente inaceptable,” por favor explique su respuesta y sus sugerencias de mejoria.

18. ¿Hay otras cuestiones de gestión, tales como el hacinamiento, las necesidades de instalaciones, seguridad, etc que le gustaría expresar sus pensamientos y opiniones?

COMENTARIOS ADICIONALES?

Usted tiene la oportunidad de compartir comentarios adicionales que sean de mejorar o mantener el Área de Recreación en el Proyecto de Wells. **Por favor, siéntase en libertad de compartir sus pensamientos.**

¡Gracias por completar esta encuesta!

Commissioners:
T. JAMES DAVIS
LYNN M. HEMINGER
RONALD E. SKAGEN

General Manager:
WILLIAM C. DOBBINS

Public Utility District No. 1 of Douglas County

1151 Valley Mall Parkway • East Wenatchee, Washington 98802-4497 • 509/884-7191 • FAX 509/884-0553 • www.douglaspud.org

To: Pateros Parent Advisory Committee April 28, 2008

Subject: Wells Project Recreation Area Community Resident Survey

Dear: Parent Advisory Committee Member

Douglas County PUD is conducting a survey to better understand the recreational needs of local residents who use Wells Hydroelectric Project lands and park facilities. The information collected from this survey will be used to develop future management options for parks, boat launches, and lands surrounding the Wells Reservoir.

Please complete the attached survey and place it in the return envelope. Postage is not needed. Participation in this study is voluntary and confidential, and there is no need to include your name or address with your response.

We appreciate your participation in this survey. Please feel free to contact me if you have any questions.

Sincerely,

Scott Kreiter
Natural Resources Specialist
509-881-2327

Commissioners:
T. JAMES DAVIS
LYNN M. HEMINGER
RONALD E. SKAGEN

General Manager:
WILLIAM C. DOBBINS

Public Utility District No. 1 of Douglas County

1151 Valley Mall Parkway • East Wenatchee, Washington 98802-4497 • 509/884-7191 • FAX 509/884-0553 • www.douglaspud.org

A: Comisión Consultiva de Pateros 28 de abril de 2008

Asunto: Encuesta de residente para la Zona Recrecrativa para el Proyecto de Wells

Estimado/a: Miembro del Comité Asesor

Douglas County PUD está llevando a cabo un estudio para comprender mejor las necesidades de esparcimiento de los residentes locales que usan las areas y las instalaciones de parque de el Proyecto Hidroeléctrico de Wells. La información recogida a partir de esta encuesta se utilizará para desarrollar futuras opciones de gestión de los parques, los lanzamientos del barco, y las tierras circundantes de la Reserva de Wells.

Por favor completa el estudio adjunto y colóquelo en el sobre de retorno. Gastos de envío no son necesario. La participación en este estudio es voluntaria y confidencial, y no hay necesidad de incluir su nombre o dirección con su respuesta.

Agradecemos su participación en esta encuesta. Por favor, no dude en ponerse en contacto conmigo si tiene alguna pregunta.

Atentamente,

Scott Kreiter

Scott Kreiter
Especialista en Recursos Naturales
509-881-2327