Recreation Resources Study Summary

Packwood Lake Hydroelectric Project Study Report Meeting
December 13, 2006
Lacey, Washington
Recreation Resources Study
Preliminary Results

- Recreation Inventory
- USFS Wilderness Permit Data
- On-Site Surveys
- Observations (Packwood Lake/Lake Creek)
- Energy Northwest and Contractor Visits
- Traffic Counts
Recreation Study Area
Recreation Inventory

- Dispersed Overnight Camping Areas
- Dispersed Day-use Only Areas
- Trails
- Wilderness Stations
- Buildings
- Facilities
Dispersed Sites

- Non-Wilderness Dispersed Sites
  - 18 Campsites
  - 2 day-use (no camping sign and space constraints)

- Wilderness Sites
  - 17 Campsites
  - 6 Disturbed areas (stock damage, rocky, flooding, fallen trees)
Inventory Map
Dispersed Sites
Dispersed Sites
Facilities

- US Forest Service Guard Station
- Historic Log Ranger Station
- Outhouses
USFS Wilderness Permit System

- 2005 (complete)
  - Day Use/Overnight
  - Peak-Season/Off-Seasons
  - Weekday, Weekend Day and Holiday
  - Visitor Demographics

- 2006 (need from Forest Service)
### FS Wilderness Permits (2005)

<table>
<thead>
<tr>
<th></th>
<th>Day Use</th>
<th>Overnight</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg # Nights</td>
<td>2.64</td>
<td>3.2</td>
<td>2.94</td>
</tr>
<tr>
<td>Avg Party Size</td>
<td>2.43</td>
<td>3.2</td>
<td>2.87</td>
</tr>
<tr>
<td>Avg # Stock</td>
<td>0.16</td>
<td>0.24</td>
<td>0.18</td>
</tr>
<tr>
<td>Avg # Dogs</td>
<td>0.5</td>
<td>0.24</td>
<td>0.44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Peak-Season</th>
<th>Off-Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg # Nights</td>
<td>2.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Avg Party Size</td>
<td>2.45</td>
<td>3.2</td>
</tr>
<tr>
<td>Avg # Stock</td>
<td>0.43</td>
<td>0.26</td>
</tr>
<tr>
<td>Avg # Dogs</td>
<td>0.15</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Bar chart showing average nights, party size, stock, and dogs for day use and overnight permits in peak and off-season.
### FS Wilderness Permits (2005)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Peak-Season</th>
<th>Off-Season</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day Use</strong></td>
<td>75</td>
<td>60</td>
<td>15</td>
</tr>
<tr>
<td><strong>Overnight</strong></td>
<td>198</td>
<td>150</td>
<td>48</td>
</tr>
<tr>
<td><strong>Visitor Days</strong></td>
<td>1066</td>
<td>269</td>
<td>93</td>
</tr>
<tr>
<td><strong>Total # People</strong></td>
<td>198</td>
<td>150</td>
<td>48</td>
</tr>
<tr>
<td><strong>Visitor Days</strong></td>
<td>242</td>
<td>973</td>
<td>93</td>
</tr>
</tbody>
</table>

Legend:
- # Permit Entries
- Total # People
- Visitor Days
FS Wilderness Permits (2005)
FS Wilderness Permits (2005)
On-Site Surveys

- Completed Surveys at Packwood Lake Trailhead Parking Lot (2006)
  - April 29 to November 30
  - Surveys from 8:00 am to 3:00 pm
  - Noon vehicle counts at parking lot

- Obtained USFS Survey data at Packwood Lake Old Ranger Station (2005)
  - August 9 to September 5
2006 Surveys at Packwood Lake Trailhead

- Surveyors surveyed and/or documented all groups at Trailhead Parking Lot
  - Many drive-through (documented group size)
  - Some refused survey (documented group size and access method)
  - Detailed questions to groups visiting Packwood Lake
- Peak-Season 2006
  - 19 days/290 groups documented/surveyed between Memorial Day Weekend and Labor Day
- Off-Season
  - 4 days/20 groups documented/surveyed in Spring (April 29 – May 26)
  - 9 days documented/surveyed in Fall (Sept. 9 – Nov.) + 5 days additional vehicle counts. (*Data input and analysis in process*)
2006 Surveys

Peak - Travel Routes/Methods

Peak-Season Travel Routes

Peak-Season Travel Methods

ATV
Motorcycle
Bike
Hike
Horse/Pack

Trail #74/Pipeline
Trail #78
Parking Lot/Drive thru
# 2006 Surveys

## Peak - Travel Routes/Methods

### Peak-Season Travel Routes and Methods

<table>
<thead>
<tr>
<th>Route/Method</th>
<th>ATV</th>
<th>Motorcycle</th>
<th>Bike</th>
<th>Hike</th>
<th>ATV</th>
<th>Motorcycle</th>
<th>Bike</th>
<th>Hike</th>
<th>Horse/Pack</th>
<th>Parking Lot/Drive thru</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overnight (PWL)</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Day Use (PWL)</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- **ATV:** ATV
- **Motorcycle:** Motorcycle
- **Bike:** Bike
- **Hike:** Hike
- **Horse/Pack:** Horse/Pack
- **Parking Lot/Drive thru:** Parking Lot/Drive thru
2006 Surveys – Spring - Travel Routes/Methods

Spring-Season Travel Routes and Methods

- Overnight (PWL)
- Day Use (PWL)
- Other/Unknown

- ATV
- Motorcycle
- Bike
- Hike

- Trail #74/Pipeline
- Trail #78
- Parking Lot/Drive thru
2006 Surveys
Packwood Lake Visits

<table>
<thead>
<tr>
<th></th>
<th>Day Use</th>
<th>Overnight</th>
<th>Day Use</th>
<th>Overnight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak-Season</td>
<td>4.7</td>
<td>3.3</td>
<td>4.3</td>
<td>2.12</td>
</tr>
<tr>
<td>Spring-Season</td>
<td>6</td>
<td>2.6</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

- Avg # Nights
- Avg # Hours
- Avg Party Size
2006 Surveys
Packwood Lake Visits

Packwood Lake - Seasonal Visits

Packwood Lake - Average Daily Visits
2006 Surveys
Packwood Lake Visits

Average # of People/Day

Average Visitor Day

- Peak-Season
- Spring-Seasons
2006 Surveys
Packwood Lake Visitor Destinations

Packwood Lake - Peak-Season
Visitor Days/Destination

- 547 (9%)
- 2140 (34%)
- 3616 (57%)

Packwood Lake - Spring-Season
Visitor Days/Destination

- 0
- 40 (30%)
- 94 (70%)

Legend:
- Non-Wilderness
- Wilderness
- Both
What activities did you participate in at Packwood Lake during your visit?

- **Peak-Season**
- **Spring-Season**

- **Camping**
- **Picnicking**
- **Boat Fishing**
- **Shore Fishing**
- **Other Boating**
- **Visiting Beach**
- **Wading/Swimming**
- **Hiking**
- **Hunting**
- **Pictures**
What seasons of the year do you visit Packwood Lake?

- **First Visit**
  - Peak-Season: 39%
  - Spring-Season: 50%
- **Summer**
  - Peak-Season: 100%
  - Spring-Season: 100%
- **Fall**
  - Peak-Season: 27%
  - Spring-Season: 0%
- **Winter**
  - Peak-Season: 10%
  - Spring-Season: 0%
- **Spring**
  - Peak-Season: 28%
  - Spring-Season: 100%

Frequency of Visits to Packwood Lake

- How many years have you been coming to Packwood Lake?
  - Peak-Season: 16.09
  - Spring-Season: 21.67
- How many times a year do you visit Packwood Lake?
  - Peak-Season: 2.52
  - Spring-Season: 3
2006 Surveys
Packwood Lake Visitor Opinions

Opinions Regarding Moving Camping Areas Away From Packwood Lake Shoreline

Opinions Regarding Eliminating ATV/Motorized Vehicles at Packwood Lake

- Peak-Season
- Spring-Season

Bad Idea | Good Idea | No Opinion
2006 Surveys
Packwood Lake Visitor Ratings

Rating Packwood Lake (5 is best)

Scale of 1-5, how do you rate Packwood Lake area?
Scale of 1-5, how rate recreation experience at Packwood Lake?
2006 Surveys
Packwood Lake Crowding/Comments

Visitor Survey Comments Regarding Improvements/Amenities/Wants

- Better/Cleaner/More Outhouses (37%)
- Trash cans/remove trash (12%)
- Boat rentals (8%)
- Horses off trails/less horses/manure clean-up (5%)
- Improve #74 road & gate for ATV access (5%)
- Trail maintenance/improvements (5%)
- Separate ATV's – Trail #74 ATV only (3%)
- Upgrade Trail 78 for ATV/more ATV trails (3%)
- Concession stand/expresso (3%)
- More campsites (3%)
- Water supply (2%)
- Trail around Lake (2%)
- No commercialism (2%)
- Open fishing using bait (2%)
- Picnic tables (2%)
- Cleared livestock areas (2%)
- Horse camp (2%)
- Lodge (2%)
- Disability access (2%)

Crowding (1 is not crowded and 5 is overcrowded)

Scale of 1-5, how would you rate crowding at Packwood Lake?

- Peak-Season
- Spring-Season

Crowding (1 is not crowded and 5 is overcrowded)

2.3 2.3
2006 Surveys
PWL Parking Lot Vehicle Counts

Weather vs # of Vehicles in Packwood Lake Parking Lot (noon counts)

- Terrible
- Decent
- Excellent

Average # Vehicles

Peak-Season
Spring-Season
Preliminary Results for Spring/Peak-Seasons

- Majority of visitors from Pierce and Lewis counties
- Next highest number of visitors from King and Thurston Counties
- Updated with all visitors for Peak, and Spring/Fall in Report
USFS Surveys at Packwood Lake
Old Ranger Station (2005)

- **25 days/171 Groups Surveyed between August 9 and September 5, 2005**
  - Travel Routes/Methods
  - Group Size, Destination and Length of Stay
  - Activities
    - Packwood Lake visits - Frequency and Season
    - Comments regarding improvements/amenities @ Packwood Lake
  - Demographics
- **Same time as observations**
- **Results included in Report**
USFS Surveys
Packwood Lake Old Ranger Station (2005)

<table>
<thead>
<tr>
<th></th>
<th>Avg # People/Day</th>
<th>Avg Party Size</th>
<th>Avg # of Nights</th>
<th>Avg # Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekday Day Use</td>
<td>5.2</td>
<td>2.59</td>
<td>3.16</td>
<td>2.64</td>
</tr>
<tr>
<td>Weekend Day Use</td>
<td>26.88</td>
<td>3.98</td>
<td>2.64</td>
<td>2.33</td>
</tr>
<tr>
<td>Holiday</td>
<td>22</td>
<td>3.67</td>
<td>2.33</td>
<td>3.25</td>
</tr>
<tr>
<td>Weekday Overnight</td>
<td>7.13</td>
<td>3.25</td>
<td>2.49</td>
<td>2.49</td>
</tr>
<tr>
<td>Weekend Overnight</td>
<td>19.63</td>
<td>3.93</td>
<td>1.85</td>
<td>2.67</td>
</tr>
<tr>
<td>Holiday</td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>
Observations

- **EN and Contractor Observations**
  - 2006 at Packwood Lake
    - During routine visits
    - During field work

- **FS Observations at Packwood Lake**
  - 2005 at Old Log Ranger Station
  - Route/Method, # People Observed
    - Same time as surveys
    - Result included in report

- **Observations at Lake Creek (2006)**
  - No people were observed at Lake Creek (June – October)
Observational Data (2006)
Energy Northwest and Contractors

EN and Contractor Observations (Weekdays)
(Average Number of People Observed/Day)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Off-Season Spring</th>
<th>June</th>
<th>July</th>
<th>August</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATV-observed</td>
<td>0.0</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>0.2</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Bicycle</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Horse</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Horse/Pack Stock</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>People on Trail</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>People at Lake</td>
<td>5.6</td>
<td>0.8</td>
<td>0.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Vehicles in Parking Lot</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

- ATV: All-Terrain Vehicles
- Motorcycle
- Bicycle
- Horse
- Horse/Pack Stock
- People on Trail
- People at Lake
- Vehicles in Parking Lot

- Off-Season Spring
- June
- July
- August
Energy Northwest Route and Method
Spring Off-Season 2006 (10 Trips)
EN & Contractor Visit Records

Contractor Route and Method
Peak-Season 2006 (10 Trips)

Energy Northwest Route and Method
Peak-Season 2006 (19 Trips)
Traffic Counters (2006)

- **Two on Trail #74**
  - Near Diversion, approx. 200 feet apart

- **One on Forest Service Road 1260**
  - Near FS Boundary
Schedule

- Draft Report
  - February 1, 2007
- 30-Day Review
- Final Report
  - March/April 2007
- Needs Analysis
  - 2007