



BAKER RIVER PROJECT RELICENSE

Recreational & Aesthetic Resources Working Group

July 22, 2002

9:00 a.m. - 2:30 p.m.

USFS Mt. Baker-Snoqualmie National Forest Headquarters 21905 64th Ave. West Mountlake Terrace, WA 98043

AGENDA

- 1. Review/revise minutes/agenda
- 2. Review action items
- 3. Process for identifying draft PM&E measures
- 4. R16 Visioning Exercise teamlet report
- 5. Review of 2001 data/2002 data needs: R13 survey data
- 6. Results of WG review, areas to address
- 7. HYDROPS model demo status, handouts
- 8. Set agenda and location for August meeting
- 9. Evaluate meeting





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USFS Office, Mountlake Terrace, WA

FINAL MEETING NOTES

Mission: "To develop alternative solutions and recommendations addressing recreation, education and aesthetic resources related to the Baker River Project and its operations leading to a settlement agreement."

Team Leader: Chris Lawson (Huckell/Weinman Associates) (425) 828-4463,

clawson@huckellweinman.com

PSE Contact: Tony Fuchs: (425) 462-3553, tfuchs@puget.com

PRESENT

Chris Lawson and Alex Cohen (Huckell/Weinman Associates, Inc.), Susan Rosebrough (National Park Service), Ann Dunphy (U.S Forest Service), Ardis Bynum (U.S. Forest Service), Jim Eychaner (Interagency Committee for Outdoor Recreation), Lauri Vigue (WDFW), Andy Hatfield (PSE), Tony Fuchs (PSE), Dee Endelman (Agreement Dynamics), Lyn Wiltse, facilitator (PDSA Consulting)

NOTE: The group welcomed Alex Cohen representing Huckell/Weinman Associates, Inc. along with Chris Lawson.

SCHEDULE:

All meetings are from 9:00 to 2:30.

Next meeting dates: August 22, September 23, October 28, November 19, and December 17.

Note: The August meeting will be at Sedro-Woolley, at the new Forest Service/Government Building.

July 22, 2002 Agenda

9:00 a.m. to 2:30 p. m. Mountlake Terrace. WA

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- 5. Review of 2001 data/20002 data needs: R13 survey data
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NEW ACTION ITEMS:

- ALL: Review Chris' preliminary draft for Visioning Exercise agenda.
- ALL: Review list of 5 (12) issues on Dee's handout plus others in notes and send ideas to Chris by July 31.
- ALL: Send ideas for recreation-based operational scenarios to Tony. He will share it with the consultant who will do the HYDROPS demonstration for this Working Group.
- Tony: Send out "final" versions of Process Document and Communication Protocol to members along with latest schedule. NOTE: The ALP was approved by FERC July 19, 2002. FERC indicated that they made some changes in the Process Document and Communication Protocol. Tony will send out the final versions as soon as they become available.
- Tony: Bring land ownership map to next meeting. Ownership issues in Concrete and around boat ramp on Lake Shannon are still unclear.
- Tony: Check current status of Trillium property ownership.
- Lyn: Check with the Howards re: their participation.
- Tony: Reserve conference call line for August 13 9:00 11:00.
- Dee: Email out matrix that other Working Group settlement teamlets are using (for our reference).
- Ann: Button up with Forest Service facilitator re: August 22 meeting.
- Chris: Email out the results of R-13 to those who want it electronically.
- Chris: Come up with draft reference list of R14 information sources. Send out for feedback prior to our August meeting.
- Chris and Tony: Gather land-use information.
- Ann/Chris: Determine viewpoints to use in aesthetics assessment, get photos from these points while the lake level is up.
- Chris: Map what we need to do in the Working Group to a schedule.

REPORT ON OLD ACTION ITEMS

• Tony: Checked to see if 401 Water Quality certification is current. PSE is currently operating under IPP (i.e., there currently is no 401 certification for the project). Preparation for Water Quality certification is underway (to be officially initiated with submittal of the license application).

PROCESS FOR IDENTIFYING DRAFT PM&E MEASURES

Dee Endelman, of Agreement Dynamics, presented the Solution Team's request that she start working with the Working Groups (approximately 1 ½ hours each meeting) to begin coming up with a very sketchy draft of potential PM&Es. She distributed a draft outline of the process along with an initial framing of the issues this group originally defined (in October 2000). Prior to this meeting, Chris reviewed the issues and came up with a list of five key issues (framed as problems to be solved).

All were asked to review this list to see that the interests of their organizations are represented. The following additional issues or concepts were mentioned as important to be included in the list:

- Nature study/observation
- Dispersed camping
- Consumptive uses (hunting/gathering/fishing/wood cutting, etc.)
- Make sure the bullets listed under #1 respect balance with fish and wildlife
- List ADA compliance separate from general public accessibility
- Changing recreation needs
- Balance of recreation between Baker and Shannon

The Recreation Settlement Teamlet will meet via conference call on Tuesday, August 13, from 9:00 - 11:00. Teamlet members are Jim, Lauri, Chris, and Ann (with Ardis as backup). Dee will facilitate.

R16: VISIONING EXERCISE TEAMLET

Chris distributed notes from the teamlet conference call of May 24. They discussed the scope of participation that would be appropriate. Should it be limited mainly to current working group members? Should we include certain specialists e.g., Recreation Resource Management, Whatcom County, Skagit County, North Cascades Institute, Audubon Society (Christy Norman), Pacific Northwest Trails Association, Town of Concrete, Washington Outfitters and Guides Association? (The May 24 discussion resulted in the conclusion that participation in the visioning exercise should be limited, primarily to members of the recreation working group. This conclusion was revisited in the July 22 discussion.)

Re: Format, Ann suggested that a USFS facilitator attend our August 22 meeting to explain the USFS "Recreation Focus" approach and provide a "train-the-trainer" session for us.

Ann briefly described the "Recreation Focus" process. It involves breaking down the geographical areas into patterns of social use and identifying "special places" within these areas, identifying attributes that make those places special, and then brainstorming the future (addressing issues and how to handle conflicts).

We discussed doing a first iteration with the Forest Service facilitator and then going through the process with the counties, City of Concrete, DNR, Crown Pacific, and the new Trillium property owner(s). We could then assess next steps based on the results of that exercise.

Jim distributed a handout on estimates of future participation in outdoor recreation activities that he was preparing as an Interagency Committee for Outdoor Recreation report to support the Statewide Comprehensive Outdoor recreation Plan (SCORP). He suggested these trends should be taken into account in the Visioning Exercise.

We agreed to invite the Forest Service facilitator (Kathy Ludlow) to our August 22 meeting to explain the Forest Service process and work with us to develop an appropriate format for us to do the Visioning Exercise. As described in the Study Plan, the aim of this exercise is to identify improvements and management actions that may be needed but were not identified through any of the six preceding needs analysis tasks. This relates to the ninth stated objective for study R16, which is "What types of recreational activities are emerging uses or uses that might occur in the future, and are not currently supported by existing recreation facilities and management programs?"

We agreed to consider using the regular September 23 meeting for the Visioning Exercise. We'll determine appropriate next steps after meeting with the Forest Service facilitator at our August meeting.

REVIEW OF 2001 DATA/2002 DATA NEEDS: R13 SURVEY DATA

Chris distributed hard copies of R13 survey results received last week, and walked through the results for each question included in this package by presenting the spreadsheets on the projector. (These results are from second-stage processing of survey responses, focusing on various groups or subsets of the total population. Initial response tabulations for the total population were distributed in February 2002.) We discussed the data. The compilation of the second-stage results is nearly complete (results for the remaining questions should be available by end of July).

Next Steps: Chris will email spreadsheets with complete results from the second-stage analysis for R13 as soon as they become available.

R15: SECONDARY DATA COLLECTION

This is ongoing. A few information sources have yet to be collected. Stay tuned.

R9: ELECTRONIC MONITORING

This is ongoing. (Counters were reinstalled in late April.)

R11: CAPACITY AND SUITABILITY

This is ongoing. (The primary component of this study is GIS analysis, which the Forest Service is preparing for the national forest lands and PSE will do for the Lower Baker area. Most of this work will follow the results of the needs analysis.)

R15: RECREATIONAL TRAIL ROUTING

This is ongoing (using same process as using for R11).

R16: RECREATION NEEDS ANALYSIS

This is ongoing. (The first six tasks, i.e., all tasks prior to the visioning exercise, have been started and are in various stages of completion.)

STUDIES/PRODUCTS STILL TO BE ADDRESSED

- R5 Visual and Aesthetics study
- Report On Land Use

• Recreation Management Plan

POTENTIAL 2003 STUDIES

- Capacity/Suitability Analysis (intended for completion fall/winter 2002, may stretch into 2003)
- R5 Visual and Aesthetics study: move from study request to study plan? Identify viewpoints?
- Trailhead survey? (goats)
- Supplemental surveys (field work)

HYDROPS MODEL DEMONSTRATION

Chris reported that the soonest we could get a demonstration would be this September. PSE is still working with the folks who put the model together to bolster the outputs. He distributed handouts that describe the model and what the outputs would entail. He also handed out a draft request form we would use to run various scenarios.

RESULTS OF WORKING GROUP REVIEW, AREAS TO ADDRESS

Chris distributed summarized data from the Working Group review conducted at the May meeting. Areas to address are pre-judging of people and ideas, sense of teamwork, behaviors matching words, giving more positive than negative feedback and willingness to compromise sometimes.

For specific roles, the Team Leader needs to represent PSE's interests in a more collaborative way and getting help to complete tasks in a more timely manner. (Welcome Alex!) The facilitator will work on enforcing group norms and remaining neutral regarding participant's interests. Consultants need more help in getting work done in a timely manner.

HANDOUTS

- Memo on framing issues for collaborative problem solving, diagram of process for drafting PM&Es, outline for how to resolve issues jointly, and preliminary list of recreation issue statements.
- Draft of Estimates of Future Participation in Outdoor Recreation in WA State: A Technical Report by the Interagency Committee for Outdoor Recreation
- Draft 7/21/02 Recreation Needs Analysis Task 7, Visioning Exercise Outline/Agenda
- Baker River system schematic diagram, slides on Skagit River routing and electricity demand forecasting from presentation on HYDROPS model, and draft HYDROPS model study request form
- Working Group Evaluation from May 20, 2002.

PARKING LOT

- Visioning exercise
- Organizational/agency goals
- Bounce around with meeting locations
- Operationally define "vicinity", "watershed", "project induced", "dispersed", or "displaced"
- List authorities that this team must be aware of
- Look at dispersed recreation with the Project as a whole
- Look into getting guest speaker from Seattle City Light
- Tie education piece to ALL Working Groups
- Hold periodic "outreach" meetings for feedback from other groups (hiking, horseback riding, etc.)

- Land management
- SCORP data from Jim
- Forest Service presentation of SMS
- Need good maps of the project area
- Consult with Jim Johnston (with WDFW)
- Trailhead surveys
- Have demonstration of Charles Howard Model

EVALUATION OF MEETING

Things Done Well

- Welcome Alex!
- Susan helped us move forward- Thanks Susan!
- John Wayne/zip code expressions
- Raspberry Milanos
- Dee's guidance

Need for Improvement

- We lost Earl (moved on)
- We are way behind given the time line

WHAT'S HOT?

- Lots of information to digest
- Anxiety re: aggressive schedule
- Expectation that we can make decisions without all information

TENTATIVE AGENDA

August 22, 2002 Agenda – USFS Office/Sedro-Woolley

9:00 a.m. to 2:30 p.m.

NOTE: BRING LUNCH; BE PREPARED TO WORK THROUGH

- 1. Review/revise minutes/agenda
- 2. Review Action Items
- 3. PMEs
- 4. R16: Visioning Exercise
 - Kathy Ludlow Forest Service facilitator the Portland region on "Recreation Focus" process
 - Where do we go from here?
- 5. Study Update
- 6. Set agenda and location for September 23 meeting
- 7. Evaluate meeting

Baker River Project Relicense Recreation Working Group

Recreation Needs Analysis Task 7, Visioning Exercise Outline/Agenda DRAFT 7/21/02

- 1. Introductions
- 2. Background
 - 2.1 Overview of Baker Recreation Studies and Progress
 - 2.2 Visioning Exercise Objectives
 - 2.3 Visioning Exercise Format and Ground Rules
- 3. Recreation Focus Process
 - 3.1 Baker Basin Perspective
 - 3.2 Special Components in the Basin
- 4. Review of Needs Analysis Results to Date
 - 4.1 Task-by-Task Results
 - Capacity Utilization
 - Survey Response
 - Recreation Demand/Use Projections
 - Plan and Policy Guidance
 - Market Area Assessment
 - Project Operations Assessment

- 4.2 Preliminary Identification of Needs, Based on Tasks 1-6
- Developed overnight use facilities
- Developed day use facilities
- Dispersed recreation resources
- Trail-based recreation
- Resource protection measures
- Infrastructure and service measures
- 5. Process Check and Vacuuming
 - 5.1 Evaluation of Preliminary Needs from Standard Analysis
 - 5.2 Identification of Needs from Non-Standard Analysis
 - Activity-by-activity review
 - New or emerging uses
 - Other considerations
- 6. Actions Items/Future Planning Needs
- 7. Recap and Meeting Evaluation

Estimates of Future Participation in Outdoor Recreation in Washington State: A Technical Report By the Interagency Committee for Outdoor Recreation



Introduction

The Interagency Committee for Outdoor Recreation (IAC) is charged under state law with the compilation of a forecast of recreation resource demand.¹

Projecting recreation participation into the future is at best a problematic exercise. Participation in various outdoor activities will be affected by changes in population, available infrastructure, lifestyles, economics, technology, and the politics of land use.

Trends may be best detected in hindsight. Past trends, in fact, may be instructional. IAC has complied statewide participation data on a somewhat regular basis since the late 1960's. The general results of IAC surveys done at roughly 10-year intervals over the past 3 decades can be compared, albeit with caution.

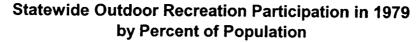
Survey methodology for each of the 3 surveys is generally the same: telephone contact with mail follow-up. The exact use of both telephone and mail were different each time, however. For example, the 1989 survey was a combination of recall and diary, while 1999 survey relied on a statewide panel of people recruited by telephone to keep activity diaries for a calendar year. 1989 results were reported in household numbers, 1999 results in individual numbers.

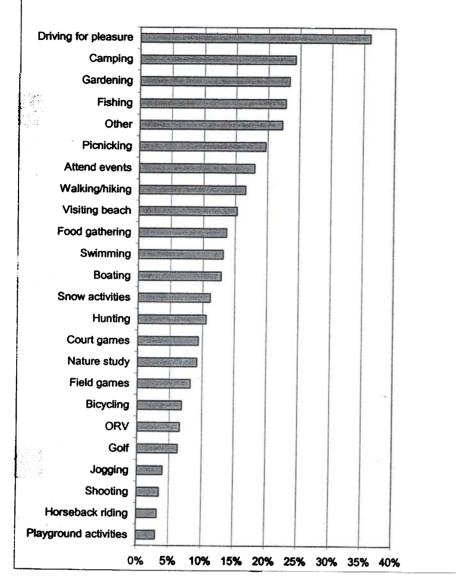
Also, results from each survey are reported in slightly different categories (combinations of related activities), making direct comparison difficult. For example, in surveys done in 1979 and 1999 bicycling was considered in a category by itself, but in 1989 it was combined with other recreation including equestrian use under a category called "nonmotorized riding."

Regardless, the data does suggest changes in participation over time, as depicted in the following charts.

¹ 79A.25.020(3)(b)





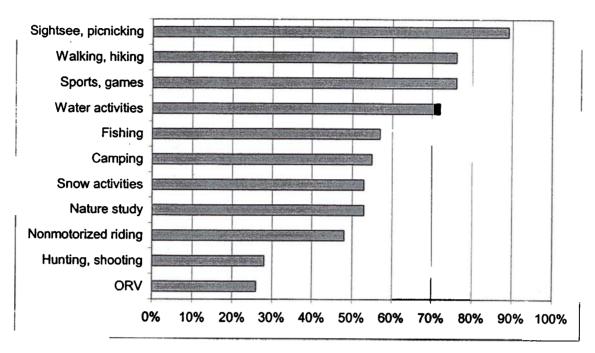


Data from Washington Statewide Outdoor Recreation Plan 1979, prepared by Interagency Committee for Outdoor Recreation.

Total state population in 1979 was about 3.9 million (Office of Financial Management data).

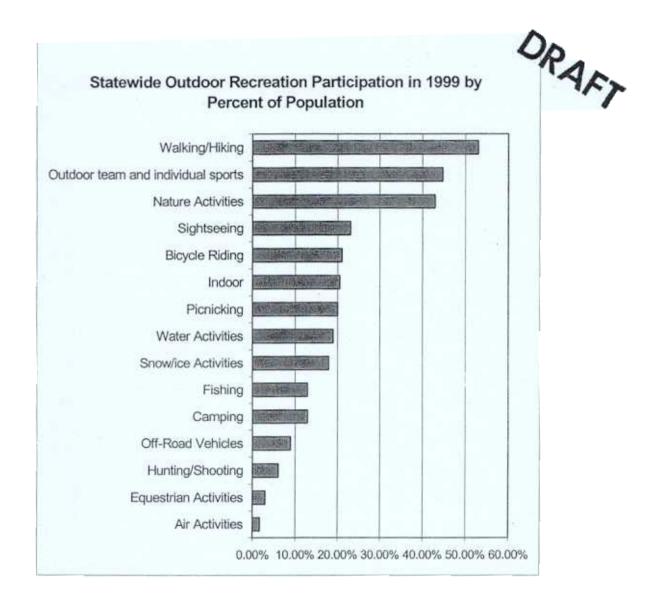






Data from Washington Outdoors: Assessment and Policy Plan 1990-1995, Interagency Committee for Outdoor Recreation, in cooperation with Pacific Northwest Regional Recreation Committee.

Total state population in 1989 was about 4.7 million, in an estimated 1.7 million households (Office of Financial Management data).



Data from *An Assessment of Outdoor Recreation in Washington State 2002-2005*, Interagency Committee for Outdoor Recreation.

Total state population in 1999 was about 5.8 million (Office of Financial Management data).

It is possible to make observations and draw general conclusions from the data sets. For example, fishing and camping appear to be in decline. Walking and hiking combined appear to be growing. Equestrian activities and ORV riding appear to hold steady. Participation as a percent of total population may be in decline: Washington State gained 1 million people between 1990 and 2000, and if Department of Health reports on increasing obesity problems are accurate, more people are increasingly inactive.

Completely new activities are nearly impossible to predict: for example, the emergence of the personal watercraft and the mountain bike in the 1980s and 1990s were not accounted for under traditional projection methods, and indeed are difficult to detect in past data as reported above.

The future, in short, defies mathematics. Nevertheless, there is value in recognizing and attempting to anticipate changes in recreation participation. Recreation providers may use projections to avoid inappropriate investments in short-lived or under-used.

The Implications of Trends

Predicting changes in outdoor recreation suggest interesting policy decisions that may need to be addressed now or in the future. In the next few years, for example, State Parks may find itself under pressure to sacrifice undeveloped areas or open space to accommodate recreational vehicles of ever increasing size and capability. Should State Parks be expected to sacrifice "nature" for hook ups including cable television and Internet connections, or should State Parks emphasize "nature" and encourage the private sector to address the more developed segment of the camping market?

This report may raise such policy questions, but it certainly does not presume to answer them.

The Basis for Making Projections

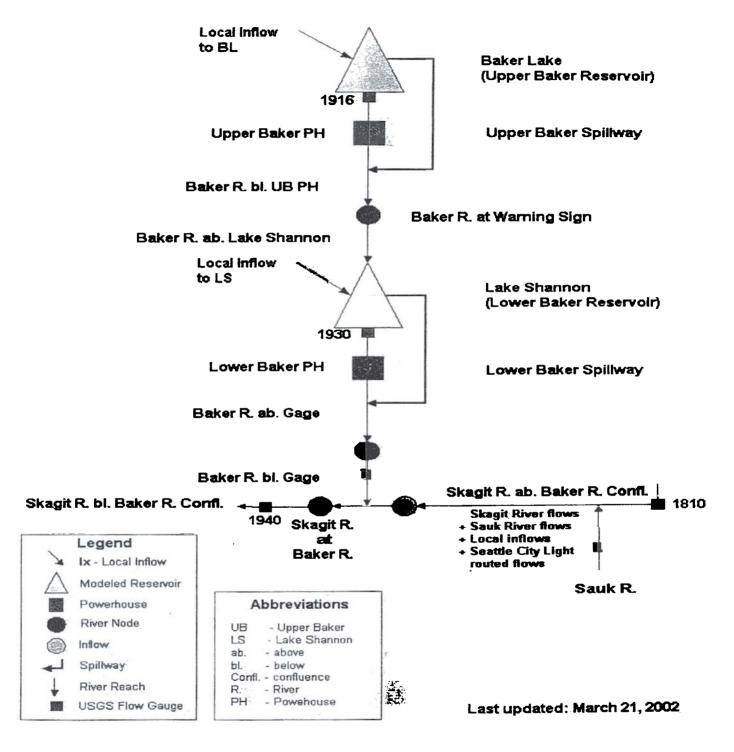
This report provides an estimate of future use by outdoor recreation activity. Each estimate is based on several elements:

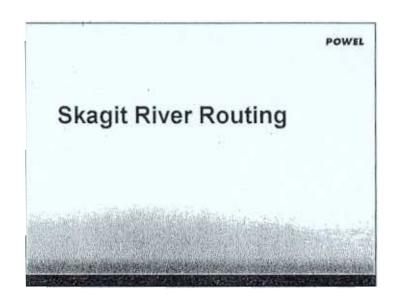
- national estimates from NSRE:
- age trends in Washington;
- estimates of resource and facility availability;
- user group organization and representation;
- land use and land designations;
- "other factors" including the economy and social pressures.

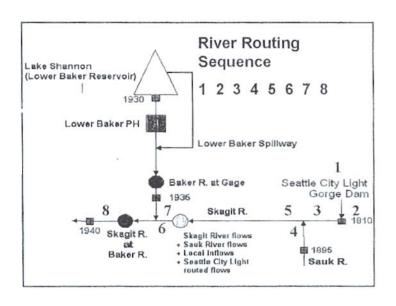
³ Physical Activity in Washington State, Washington State Department of Health, 2000

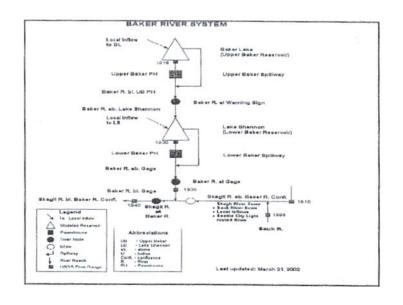
² The downward trend in fishing participation is confirmed by a decline in the number of fishing licenses sold by the Washington State Department of Fish and Wildlife (WDFW).

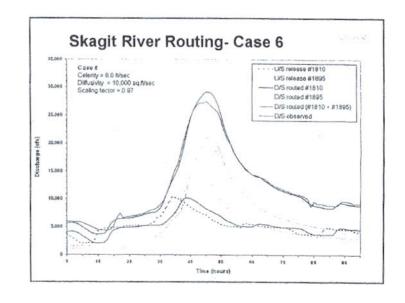
BAKER RIVER SYSTEM

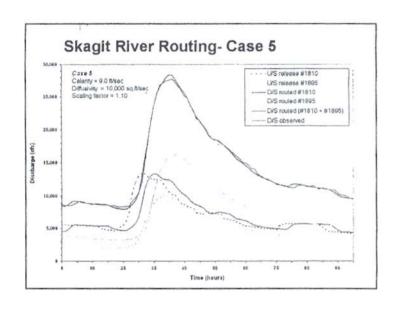


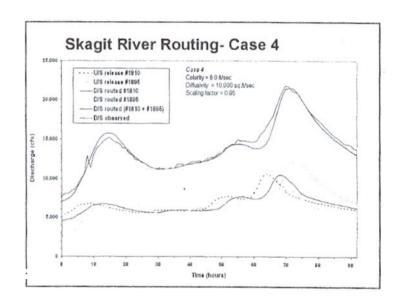


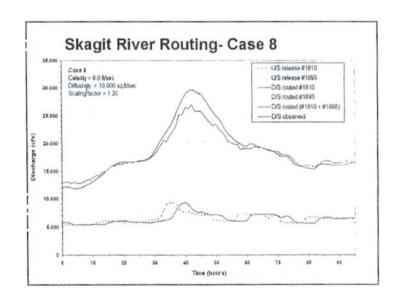


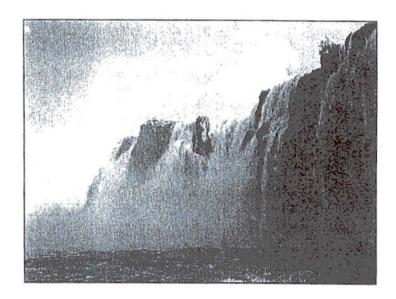


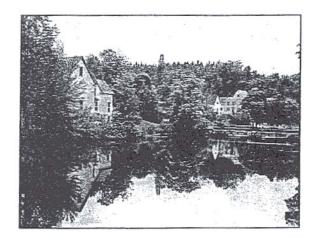


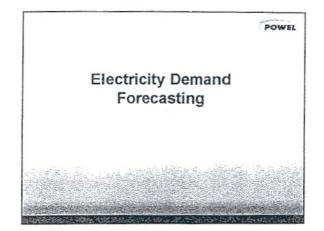












POWEL

Demand Forecasting Components

Annual trend – Historical load growth/decline Seasonal – Historical month by month pattern Diurnal – Forecasted hourly weather POWE

Forecast Electricity From Weather

- Temperature (main actor)
- · Sunshine (cloud cover)
- Precipitation (may lag several days)
- Humidity (less important here)
- · Wind (especially in winter)

Electricity vs Temperature

Correlation depends on temperature

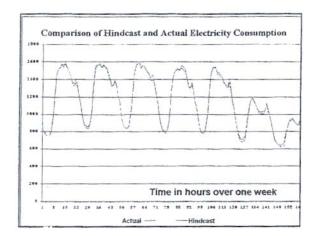
- At low temperatures, the electricity demand will decrease when temperature increases (less need for electricity heating)
- At higher temperatures, the demand does not change at all when the temperature increases ("comfortably warm")
- At even higher temperatures, air conditioning will increase the electricity demand

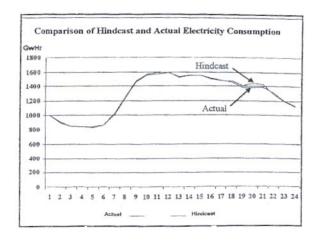
Forecast exceptions

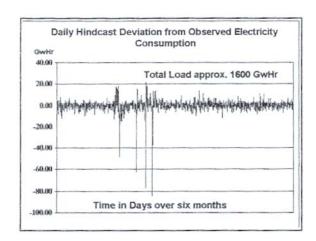
POWEL

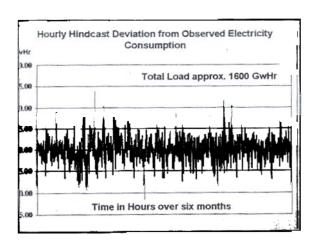
- Holiday forecasts
 - Special Thanksgiving and Christmas
- Time-of-day
 - Day and night weather influence is different
- Other exceptions
 - Other holidays
 - Civil emergencies.
 - Power system emergencies

Powel Data AS









Conclusion:
From a perfect weather forecast

One day-ahead: Less than 2% deviation

One hour-ahead: Less than 1% deviation



Powel Data AS 2

Baker River HYDROPS Model

Revised June 11, 2002

Study Request Form

Requested By	Date Requested
Scenario Title	
Purpose of Scenario	
Purpose of Reservoir Operating Level Constraints	
<u>Upper Baker</u>	
Lower Baker	
	- 2222
Purpose of Release Constraints (turbine and/or spill re Upper Baker	eases, ramping)
Lower Baker	
Skagit River at Baker River Confluence	
Other Considerations	
_	B

Constraint Definition Sheet

Scenario Title:													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reservoir Elev	ation												
Baker Lake Maximum	Hard Soft	724.0	724.0	724.0	724.0	724.0	724.0	724.0	724.0	724.0	724.0	724.0	724,
Minimum	Hard Soft	675.0	675.0	675.0	675.0	675.0	675.0	675.0	675.0	675.0	675.0	675.0	675.
Lake Shannon Maximum	Hard Soft	438.6	438.6	438.6	438.6	438.6	438.6	459.6	438.6	438.6	438.6	438.6	. 438.
Minimum	Hard Soft	367.0	367.0	367.0	367.0	367.0	367.0	B7.0	367.0	367.0	367.0	367.0	367.
Releases .		4.5.4				17.		A .		KANGSAN É	rajech s		03-y6#3+17
Baker River @ W. Maximum Minimum Baker River @ U. Maximum Minimum Skagit River @ B. Maximum Minimum Spill Lower Baker Dan Maximum Minimum Upper Baker Dan Maximum	(CFS)				4	2							
Minimum Down Rampin	(CFS)	i an Aw	****			0799718		y i we s					100
Lower Baker Poy Ramp Value Unit Time Period Skagit River @ F Ramp Value Ramp Unit Time Period	(Inches/CFS) (Hours)												

Explanation

Field	Description
	For tracking purposes.
Date Requested	For tracking purposes. Enter the date in the format mm/dd/yyyy or Mmm d, yyyy.
Scenario Title	Name of Scenario. Please be descriptive.
Purpose of Scenario	What is the objective of this scenario? Any expectation on the results?

Operating Level Constraints

Enter any additional or alternative level constraints from Puget Sound Energy's current constraints. Please provide as much information as possible, including:

Type of constraint (maximum, minimum, up ramping rate, down ramping rate)

Time constraint applies (start and end dates and times)

Condition of constraint (firm or soft)

Constraint value

Soft constraint violation penalty. If the condition is soft, that is the constraint may be violated only when necessary, specify the level of penalty with a value from 1 to 10. The value 1 indicates minimal penalty and 10 indicates a high penalty.

Operating Flow Constraints

Enter any additional or alternative flow constraints from Puget Sound Energy's current constraints. Please provide as much information as possible, including:

Type of flow (powerhouse discharge, spill, total release, instream flow)

Type of constraint (maximum, minimum, up ramping rate, down ramping rate)

Time constraint applies (start and end dates and times)

Condition of constraint (firm or soft)

Constraint value

Soft constraint violation penalty. If the condition is soft, that is the constraint may be violated only when necessary, specify the level of penalty with a value from 1 to 10. The value 1 indicates minimal penalty and 10 indicates a high penalty.

Other Considerations

Enter any additional special constraints on the system