

United States Department of the Interior

NATIONAL PARK SERVICE

Pacific West Region 1111 Jackson Street Oakland, CA 94607

January 28, 2005

The Secretary Federal Energy Regulatory Commission 888 First St., NE Washington, DC 20426

Comments on:

DeSabla-Centerville Hydroelectric Project (FERC P-803-068), Pre-Application Document, Scoping Document 1, and Study Requests

Dear Ms. Magalie R. Salas:

This letter and attachments respond to the FERC's December 3, 2004 request for comments in response to the "Notice Of Intent To File License Application..." for the DeSabla-Centerville Relicensing Project (FERC #803). The attached comments are in addition to the National Park Service's oral comments at the FERC's November 17-18, 2004 public scoping meeting, which are already a part of the relicensing record.

The National Park Service is involved in this relicensing to the extent necessary to provide for the adequate protection of recreation within the project's boundary. This comments are perliminary and the National Park Service will modify and expand on them as appropriate during the April and May, 2005 collaborative study meetings.

As per agreements among interested parties at the January 6, 2005 collaborative meetings, this response is divided into sections to correspond with the information on which we are commenting.

The National Park Service appreciates the efforts so far to develop preliminary study plans and looks forward to more fully developed study plans and methodologies. We also appreciate FERC's participation in this new ILP process. If you have any questions regarding these comments, please contact National Park Service Hydropower Coordinator, Stephen Bowes at (510) 817-1451 or by mail at 1111 Jackson Street, Suite 700, Oakland, CA 94607.

Sincerely,

Stephen M. Bowes National Park Service, Hydropower Coordinator

cc: PG&E

Section I

Comments on Study Concepts 1/25/05

Section I provides National Park Service comments on the recreation studies proposed by PG&E in their October 4, 2004 PAD (pages 6.3-8 through 6.3-12), that PG&E has not yet developed a preliminary study plan. Our responses address the applicable points of FERC's study request content, as per CFR § 5.9. Due to the simple nature of these study outlines National Park Service comments can only be very broad at this time. Additional comments will be provided once these studies have been developed further.

ASSESS PROJECTED RECREATION USE AND DEMAND IN THE PROJECT AREA

GOALS AND OBJECTIVES OF STUDY

This study would project recreation use and demand within the Project Area through the term of the new Project license. This projection would be made using projected growth rates of the Project Area's primary activities, projected growth rates of populations of the counties (as a minimum Butte, and Plumas) from which Project Area visitors originate, and historical trends of existing Project Area recreation use. These projections would be used in estimating when Project recreation facilities and the carrying capacities of Project recreation areas and affected river reaches are likely to be exceeded during the license term. Projections for recreation activity demand would be used in identifying future potential needs for recreation activities in the Project Area that currently have a low demand, but have projections of high growth. The information would also be used in determining the frequency of future recreation monitoring activities.

RELEVANT RESOURCE MANAGEMENT GOALS

Forest Land and Resource Management Plan direction:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information.
- Provide interpretive services and facilities to inform the public about Forest resources and management.
- Make portions of developed sites accessible to the physically challenged.
- Construct nature trails, photo blinds and interpretive sites where they enhance the recreation experience.
- When planning for rehabilitation of sites, plan for multiple or small group units.
- Operate and manage facilities and access to protect natural site conditions and promote user convenience.

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIED AND HOW THE RESULTS WILL BE USED

The survey is needed to monitor the potential impacts to existing recreation facilities, dispersed recreation sites, and recreation areas within the project boundary over the life of the license due to increased recreation demand and use trends. Specifically, in recreation use areas including Philbrook Lake, Snag Lake, and the affected river reaches of the West Branch Feather River (WBFR) and Philbrook Creek (east and west including Willows dispersed area).

STUDY AREA

On affected lands within the project boundary and along Project-affected reaches of the West Branch Feather River, Philbrook Creek, and the Toadtown canal.

STUDY SITES

The dispersed campsite known as the Willows and other developed and dispersed use areas within the bounds described in "Study Area", above. The exact extent of the study sites will be discussed collaboratively in consultation with PG&E and interested parties.

SCHEDULE

Initial data collection during the summer of 2006.

METHODS

Details will be developed at April/May collaborative meetings.

ANALYSIS

This analysis will incorporate data gathered from this study, data described in the "Existing Information" section below, as well as results of the Traffic Use Study proposed by the Forest Service. Information will provide a comprehensive analysis for projecting future recreation use and demands.

CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

Information on these methods is contained the following sources:

Angler Survey Methods and Their Applications in Fisheries Management, American Fisheries Society, 1994. Polloock, Jones, and Brown. (Chapter 11, Roving Creel Survey).

- Fisheries Techniques, 2nd edition. American Fisheries Society 1996. (Chapter 120, Sampling the Recreational Creel, Malvestuto, Stephen P.).
- Techniques and Equipment for Gathering Visitor Use Data on Recreation Sites (Personal Observation, page 23 -25; Traffic Counters, page 19-23; and Visitor Surveys, page 35-37).
- Wilderness Recreation Use: A Handbook of Methods and Systems, October 2000, Forest Service RMRS GTR-56 (page 57 -59, Field Sampling Strategy, Method J, The General Recreation Survey, and Method A: Mechanical Counters with Visual Calibration)

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meeting) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's Application for new License.

RELATIONSHIP TO OTHER STUDIES

Results of this study will be used in conjunction with other recreation and traffic studies to determine when carrying capacity of Project facilities and Project recreation areas are being exceeded. Projections from this study will be used to project future potential needs for facilities and opportunities.

LEVEL OF EFFORT AND COST

The preliminary estimate considering time and personnel resources for data collection, data entry, analysis, Project licensing meetings, and reports, is approximately \$45,000 (2004 dollars).

EXISTING INFORMATION

Existing information regarding recreation activities in the Project Area is provided in PG&E's PAD, Volume 1, and listed in the References section below. Limited information regarding recreation visitor characteristics, attitudes, and preference information of Project Area recreation visitors is available. This study will be used to close the gaps in the existing information, and formulate projection of future use.

REFERENCES

Angler Survey Methods and Their Applications in Fisheries Management, American Fisheries Society, 1994. Polloock, Jones, and Brown. (Chapter 11, Roving Creel Survey).

- Fisheries Techniques, 2nd edition. American Fisheries Society 1996. (Chapter 120, Sampling the Recreational Creel, Malvestuto, Stephen P.).
- Butte Creek Watershed Conservancy (BCWC). 2000a. Existing Conditions Report. Prepared by the Office of Watershed Projects, California State University, Chico Research Foundation.
- California Department of Parks and Recreation. 2003. Public Opinions and Attitudes on Outdoor Recreation in California 2002, An Element of the California Outdoor Recreation Planning Program. California Department of Parks and Recreation, California State Parks. Sacramento, CA
- California Department of Fish and Game. 1993. Butte Creek House Ecological Preserve management plan. California Department of Fish and Game. Chico, California.
- California Department of Fish and Game, Lands and Facilities Branch. Wildlife Areas and Nature Reserves. Accessed 2004. http://www.dfg.ca.gov/lands/lands.html
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- Cassidy, Jim and Calhoun, Fryar. 1990. California Whitewater, A Guide to the Rivers. North Fork Press, Berkeley, CA.
- Cordell, Ken H. et. al. 2001. Outdoor Recreation for 21st Century America. Venture Publishing. State College, PA. Champaign, IL
- Cordell, Ken H. et. al. 1999. Outdoor Recreation in American Life: A National Assessment of Demand and Supply Trends. Sagamore Publishing.
- Holbeck, Lars and C. Stanley. 1998. The Best Whitewater in California: The Guide to 180 Runs. Third Edition. 107-108, 111-112. Watershed Books. Coloma, CA
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Manning, R. E. (1999). Studies in Outdoor Recreation: Search and Research for Satisfaction, second edition. Oregon State University Press.
- Menard, Mark. M. 1999. Mountain Biking Chico. (Butte Creek Trail). Falcon Publishing, Inc. Helena, Montana.
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- Paradise Chamber of Commerce. http://www.paradisechamber.com/
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- Parr, Barry. 1999. Hiking the Sierra Nevada. (Centerville Canal). Falcon Publishing, Inc. Helena, Montana.
- Techniques and Equipment for Gathering Visitor Use Data on Recreation Sites (Personal Observation, page 23 -25; Traffic Counters, page 19-23; and Visitor Surveys, page 35-37).
- Tuthill, Bill. 1997-2004. California Creekin'. A Whitewater and Touring Guide to California: Butte Creek near Chico. Website: http://www.creekin.net/butte-cr.htm (accessed on 06/22/04).
- U.S. Department of Agriculture, Forest Service. 2004. Decision Memo Reduced Campground Service Levels (Lassen National Forest, Almanor Ranger District). United States Department of Agriculture, Forest Service, Almanor Ranger District. Chester, CA
- U.S. Department of the Interior, Bureau of Land Management. 1990. Forks of Butte Recreation Area Management Plan. U.S. Department of the Interior, Bureau of Land Management. Redding, CA
- U.S. Department of Agriculture, Lassen National Forest: Recreation Activities http://www.fs.fed.us/r5/lassen/recreation/
- U.S. Department of Agriculture, Plumas National Forest: Recreation Activities http://www.fs.fed.us/r5/plumas/recreation/
- U.S. Department of the Interior, Bureau of Land Management. Redding Office. http://www.ca.blm.gov/redding/

- USFS. 1992. Land and Resource Management Plan, Lassen National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.
- USFS. 1988. Land and Resource Management Plan, Plumas National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.
- Wilderness Recreation Use: A Handbook of Methods and Systems, October 2000, Forest Service RMRS GTR-56 (page 57 -59, Field Sampling Strategy, Method J, The General Recreation Survey, and Method A: Mechanical Counters with Visual Calibration)

ASSESS CONDITION AND ADA COMPLIANCE OF PROJECT RECREATION FACILITIES

GOALS AND OBJECTIVES OF STUDY

This study would inventory and identify the current condition of Project recreation facilities and signs. A component of this assessment would be to assess compliance of these facilities with the American with Disabilities Act (ADA) and the opportunities of persons with disabilities to participate in the Project's primary recreation activities, which include camping, boating, picnicking, and shore fishing. The assessment would be conducted during a field visit, utilizing the Project's existing sign inventory information. The assessment would also use visitor questionnaire survey results to determine visitors' preferences for additional directional, interpretive, and education signage. The information would be used to assess the need for improved barriers at parking areas to minimize impacts to adjacent resource areas.

RELEVANT RESOURCE MANAGEMENT GOALS

Forest Land and Resource Management Plan direction:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information.
- Provide interpretive services and facilities to inform the public about Forest resources and management.
- Make portions of developed sites accessible to the physically challenged.
- Construct nature trails, photo blinds and interpretive sites where they enhance the recreation experience.
- When planning for rehabilitation of sites, plan for multiple or small group units.
- Operate and manage facilities and access to protect natural site conditions and promote user convenience.

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIED AND HOW THE RESULTS WILL BE USED

Survey is needed to assess current level of accessibility at project related facilities and recreation areas within the project boundary. Study will also be necessary to identify transition needs for existing and planned improvements throughout the life of the license.

STUDY AREA

The study area would consist of existing project facilities within the project boundary.

STUDY SITES

At existing project facilities and recreation areas within the project boundary.

SCHEDULE

Inventory to be completed during the 2006-07 field season with follow up recommendations for immediate retrofits to meet ADA, and schedule for replacement of facilities over the life of the license to schedule replacement of facilities including campsites as ADA compliant.

METHODS

Americans with Disabilities Act Accessibility Guide (ADAAG), (1991), and Universal Access to Outdoor Recreation-A Design Guide (1993) provide guidelines for compliance and design of ADA facilities. ADA accessible facilities should be tailored to complement settings as described in the ROS (Recreation Opportunity Spectrum), US Access Board State Organization for Boating Access (SOBA), and Accessibility Transition Plans for the Plumas and Lassen National Forests.

ANALYSIS

Following field review and facility inventory, prepare a report addressing existing accessibility needs, and future considerations at each Project facility and Project recreation area.

CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

Established protocols on ADA standards and guideline are readily available.

PRODUCTS

Transition plans to meet ADA for Project facilities and recreation areas. Include recommendations to make existing and proposed recreation facilities for primary recreation activities (fishing, boating, swimming, and camping) accessible to persons with disabilities.

RELATIONSHIP TO OTHER STUDIES

Results of this study will be used in developing long-term maintenance, the need for immediate retrofits and/or new facility construction. In addition it will identify and establish guidelines to be used throughout the life of the project.

LEVEL OF EFFORT AND COST

Cost is estimated between \$10,000 and \$30,000 (in 2004 dollars).

EXISTING INFORMATION

Americans with Disabilities Act Accessibility Guide (ADAAG), (1991), and Universal Access to Outdoor Recreation-A Design Guide (1993) provide guideline for compliance and design of ADA facilities. ADA accessible facilities should be tailored to complement settings as described in the ROS (Recreation Opportunity Spectrum), US Access Board State Organization for Boating Access (SOBA), and Accessibility Transition Plans for the Plumas and Lassen National Forests (draft or final).

REFERENCES

Americans with Disabilities Act Accessibility Guide (ADAAG), (1991),

Universal Access to Outdoor Recreation-A Design Guide (1993)

US Access Board State Organization for Boating Access (SOBA)

- USFS. 1992. Land and Resource Management Plan, Lassen National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.
- USFS. 1988. Land and Resource Management Plan, Plumas National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.
- USFS Lassen and Plumas NF Accessibility Transition Plans, United States Department of Agriculture, Forest Service, Pacific Southwest Region.

ASSESS SUITABILITY OF PROJECT AREA LAND FOR RECREATION USE

GOALS AND OBJECTIVES OF STUDY

This study would identify Project Area land and adjacent NF (Plumas and Lassen) lands suitable for recreation facility development and dispersed recreation use given resource opportunities and constraints over the term of the new license. Constraints are areas where an environmental condition exists that would prohibit or limit Project recreation development or use (endangered species habitat, wetlands, and cultural resource sites). Opportunities are areas where environmental conditions are favorable for recreation development or use (land with low slopes, near water, and in Licensee or public ownership). Resource information would be developed using existing information and from new information collected during the relicensing proceeding. This information would be used to identify areas suitable for features such as new or expanded recreation developments including whitewater river access, ORV staging areas, trails, campgrounds and dispersed recreation use areas.

RELEVANT RESOURCE MANAGEMENT GOALS

These goals are from the Forest Land and Resource Management Plan:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information.
- Provide interpretive services and facilities to inform the public about Forest resources and management.
- Make portions of developed sites accessible to the physically challenged.
- Construct nature trails, photo blinds and interpretive sites where they enhance the recreation experience.
- When planning for rehabilitation of sites, plan for multiple or small group units.
- Operate and manage facilities and access to protect natural site conditions and promote user convenience.

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIES AND HOW THE RESULTS WILL BE USED

This survey is needed to establish baseline information for current conditions, and to identify suitable sites for future recreation opportunities throughout the Project Area including: adjacent NF Lands (Plumas and Lassen) at Philbrook and Round Valley Reservoirs, Philbrook Creek, the Willows, the High Lakes OHV Area, West Branch Dispersed Camp, and affected river reaches on West Branch Feather River. This study will result in recommendations for management strategies for future campgrounds, identification of trailheads, trails, access (including put in and take out sites for boaters, tubers, etc), dispersed camping, and day use areas throughout the life of the new license.

STUDY AREA

Within the project boundary and around Philbrook Lake, and Round Valley (Snag Lake) Reservoirs, and affected reaches of the West Branch Feather River, and Philbrook Creek, and West Branch Dispersed Camp.

STUDY SITES

Extent of study will be determined in consultation with PG&E and interested parties.

SCHEDULE

Develop projections of recreation use and demand in 2006.

METHODS

Standard methodologies used in numerous previous relicensings

CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

This study is consistent with generally accepted scientific practices used in numerous previous relicensings.

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meetings) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's application for new License.

RELATIONSHIP TO OTHER STUDIES

Results of this study will be used in conjunction with other recreation, fire hazard and traffic studies to determine opportunities, the location and need recreation developments and for access to put in and take out locations throughout the Project area.

LEVEL OF EFFORT AND COST

Estimated cost of this study is between \$10,000 and \$30,000 (2004 dollars).

EXISTING INFORMATION

Existing information regarding activities in the Project Area is provided in PG&E's PAD, Volume 1. This study will be used to close the gaps in the existing information and formulate projected use scenarios and make recommendations for suitable sites for future use and development.

REFERENCES

- Angler Survey Methods and Their Applications in Fisheries Management, American Fisheries Society, 1994. Polloock, Jones, and Brown. (Chapter 11, Roving Creel Survey).
- Butte Creek Watershed Conservancy (BCWC). 2000a. Existing Conditions Report. Prepared by the Office of Watershed Projects, California State University, Chico Research Foundation.
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- California Department of Fish and Game, Lands and Facilities Branch. Wildlife Areas and Nature Reserves. Accessed 2004. http://www.dfg.ca.gov/lands/lands.html
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- Cassidy, Jim and Calhoun, Fryar. 1990. California Whitewater, A Guide to the Rivers. North Fork Press, Berkeley, CA.
- Cordell, Ken H. et. al. 2001. Outdoor Recreation for 21st Century America. Venture Publishing. State College, PA. Champaign, IL
- Cordell, Ken H. et. al. 1999. Outdoor Recreation in American Life: A National Assessment of Demand and Supply Trends. Sagamore Publishing.
- Fisheries Techniques, 2nd edition. American Fisheries Society 1996. (Chapter 120, Sampling the Recreational Creel, Malvestuto, Stephen P.).
- Holbeck, Lars and C. Stanley. 1998. The Best Whitewater in California: The Guide to 180 Runs. Third Edition. 107-108, 111-112. Watershed Books. Coloma, CA
- Manning, R. E. (1999). Studies in Outdoor Recreation: Search and Research for Satisfaction, second edition. Oregon State University Press.
- Menard, Mark. M. 1999. Mountain Biking Chico. (Butte Creek Trail). Falcon Publishing, Inc. Helena, Montana.

- Norman, Seth. 2004. Flyfisher Guide to Northern California. Wilderness Adventures Press. Belgade, Montana.
- Pacific Gas and Electric Company. 2003. Recreation Use Monitoring Report: 1998 to 2002. Pacific Gas and Electric Company. San Francisco, CA
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- Techniques and Equipment for Gathering Visitor Use Data on Recreation Sites (Personal Observation, page 23 -25; Traffic Counters, page 19-23; and Visitor Surveys, page 35-37).
- Tuthill, Bill. 1997-2004. California Creekin'. A Whitewater and Touring Guide to California: Butte Creek near Chico. Website: http://www.creekin.net/butte-cr.htm (accessed on 06/22/04).
- USFS. 1992. Land and Resource Management Plan, Lassen National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.
- USFS. 1988. Land and Resource Management Plan, Plumas National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.
- Wilderness Recreation Use: A Handbook of Methods and Systems, October 2000, Forest Service RMRS GTR-56 (page 57 -59, Field Sampling Strategy, Method J, The General Recreation Survey, and Method A: Mechanical Counters with Visual Calibration)

ASSESS RECREATION CARRYING CAPACITY OF THE PROJECT AREA

GOALS AND OBJECTIVES OF STUDY

This study would be performed when recreation use, recreation demand and visitor questionnaire results show the need for additional recreation facilities over the term of the new license. The assessment would attempt to identify the maximum level of recreational facility development and use that Project Area lands and waters can accommodate without significantly affecting sensitive resources or creating undesirable crowded conditions. This assessment would largely be an analysis and integration of information from other sources including the recreation suitability study results that identify usable recreation lands and waters, the visitor questionnaire survey results on feelings of crowding and desired recreation experiences, resource surveys identifying the presence of sensitive resources (e.g., RT&E species, cultural resources, erodable soils), general planning information such as the Recreation Opportunity Spectrum, recreation activity spacing standards, and management goals. This information would be used in deciding the appropriate level of Project recreation facility development and management proposed initially and over the term of the new license.

RELEVANT RESOURCE MANAGEMENT GOALS

Forest Land and Resource Management Plan direction:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information.
- Provide interpretive services and facilities to inform the public about Forest resources and management.
- Make portions of developed sites accessible to the physically challenged.
- Construct nature trails, photo blinds and interpretive sites where they enhance the recreation experience.
- When planning for rehabilitation of sites, plan for multiple or small group units.
- Operate and manage facilities and access to protect natural site conditions and promote user convenience.

Additionally, Forest policy and direction concerning "Recreation Opportunity Spectrum" and Meaningful Measures Standards is relevant to this study.

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIED AND HOW THE RESULTS WILL BE USED

With the expected population growth of the State and the paving of the Skyway Road (a major access to the upper Project reservoirs and reaches), recreational use of the Project Area and vicinity is expected to increase, perhaps substantially. If increasing use is not properly managed it can result in damage to resources within the project boundary (e.g., soil compaction, vegetation loss, litter, sanitation/health issues, tree mortality, public safety, increased fire hazard, etc.). This Survey is needed to monitor use and impacts to

establish thresholds that will trigger action on the part of the licensee for new facility development etc.

STUDY AREA

Within the project boundary and on affected National Forest System Lands (Plumas and Lassen NF) within ¼ mile of the shoreline of Philbrook and Round Valley Reservoirs and Project-affected reaches of West Brach Feather River and Philbrook Creek.

STUDY SITES

The exact extent of the study sites are to be determined in consultation with PG&E and interested parties.

SCHEDULE

Complete this study during the summer of 2006 if determined necessary to address the existing overcrowding issue at the Philbrook Day Use parking area or other carrying capacity issues. Otherwise, as necessitated by triggers addressed in the "Goals and Objectives" discussion above, and additionally including one year following reconstruction of the Skyway Road project to assess the effects of that development on Project facilities.

METHODS

Details will be developed at April/May collaborative meetings.

ANALYSIS

This analysis will incorporate data gathered from this study as well as data collected in the "Existing Information" section below, as well as results of the Traffic Use Study, Suitability Study, and other applicable recreation studies. Information will provide a comprehensive analysis for responding to the demand of future recreation use.

CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

Information on these methods is contained the following sources:

- Meaningful Measure Standards
- Recreation Opportunity Spectrum
- Wilderness Recreation Use: A Handbook of Methods and Systems, October 2000, Forest Service RMRS GTR-56 (page 57 -59, Field Sampling Strategy, Method J, The General Recreation Survey, and Method A: Mechanical Counters with Visual Calibration)
- Techniques and Equipment for Gathering Visitor Use Data on Recreation Sites (Personal Observation, page 23 -25; Traffic Counters, page 19-23; and Visitor Surveys, page 35-37).

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- Fisheries Techniques, 2nd edition. American Fisheries Society 1996. (Chapter 120, Sampling the Recreational Creel, Malvestuto, Stephen P.).

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meeting) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's Application for new License, or if after that application is completed, provided to the National Park Service and other interested parties.

RELATIONSHIP TO OTHER STUDIES

Results of this study will be used in conjunction with other recreation, and traffic studies to determine when carrying capacity of Project facilities and Project recreation areas are being exceeded. Projections from this study will be used to determine future potential needs for facilities and opportunities.

LEVEL OF EFFORT AND COST

The preliminary estimate is approximately \$25,000 (2004 dollars), and considers time and personnel resources for data collection, data entry, analysis, Project licensing meetings, and reports.

EXISTING INFORMATION

Existing information regarding recreation activities in the Project Area is provided in PG&E's PAD, Volume 1, and listed in the *References* section below. Limited information regarding carrying capacity of Project facilities is available. This study will be used to close the gaps in the existing information, and formulate projection of future use, and recommendations.

REFERENCES

Angler Survey Methods and Their Applications in Fisheries Management, American Fisheries Society, 1994. Polloock, Jones, and Brown. (Chapter 11, Roving Creel Survey).

Butte Creek Watershed Conservancy (BCWC). 2000a. Existing Conditions Report. Prepared by the Office of Watershed Projects, California State University, Chico Research Foundation.

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Wilderness Recreation Use: A Handbook of Methods and Systems, October 2000, Forest Service RMRS GTR-56 (page 57 -59, Field Sampling Strategy, Method J, The General Recreation Survey, and Method A: Mechanical Counters with Visual Calibration)

ASSESS REGIONAL UNIQUENESS AND SIGNIFICANCE OF THE PROJECT AREA'S PRIMARY RECREATION OPPORTUNITIES

GOALS AND OBJECTIVES OF STUDY

This study would identify the uniqueness and relative significance of the Project Area's primary recreational opportunities under existing and future proposed modified Project operations. The Project Area's primary recreation activities likely include trout and steelhead fishing, picnicking, camping, day use, hiking, tubing, kayaking, Off-Highway vehicle (OHV) usage, and small watercraft reservoir boating. This assessment would identify regional alternatives for these opportunities that would be mapped and summarized. This information would be used to help balance the Project recreation opportunities with the other area resources, considering their uniqueness, significance, and availability.

RELEVANT RESOURCE MANAGEMENT GOALS

Land and Resources Management Plan Direction:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information
- Provide interpretive services and facilities to inform the public about Forest resources and management.
- Make portions of developed sites accessible to the physically challenged
- Construct nature trails, photo blinds and interpretive sites where they enhance the recreation experience.
- When planning for rehabilitation of sites, plan for multiple or small group units
- Operate and manage facilities and access to protect natural site conditions and promote user convenience.

Other parties and documents with applicable resource goals for the Project area include:

- California Dept. of Parks and Recreation (OHV Division)
- California Dept of Boating and waterways
- County comprehensive plans (Plumas, Butte)
- Recent books and publications (demand trends, Cordell, etc.
- Statewide Comprehensive Outdoor Recreation Plan (SCORP)
- Private recreation providers
- Bureau of Reclamation (USBR)

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIED AND HOW THE RESULTS WILL BE USED

With the expected population growth of the State and the paving of the Skyway Road (a major access to the upper Project reservoirs and reaches), recreational use of the Project Area and vicinity is expected to increase, perhaps substantially. If increasing use is not properly managed it can result in damage to resources within the project boundary (e.g., soil compaction, vegetation loss, litter, sanitation/health issues, tree mortality, public

safety, increased fire hazard, etc.). This Survey is needed to assess the regional recreational opportunities, demand, and significance of the project's most popular primary recreational activities.

STUDY AREA

Within the project boundary and including, Round Valley and Philbrook Reservoirs, and affected reaches of the West Brach Feather River and Philbrook Creek.

STUDY SITES

Exact extent of the study site to be determined in consultation with PG&E and interested parties.

SCHEDULE

Complete this study during the summer of 2006.

METHODS

Details will be developed at April/May collaborative meetings.

ANALYSIS

Gather and analyze regional recreation supply and demand information to be used in this study. The geographic extent and significance of the regional opportunity for each primary activity will be determined and linked to the Project Area using GIS base maps with data layers.

CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

PG&E has well established practices for this study in recent relicensing projects for both the Lassen and Plumas National Forests.

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meeting) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's Application for new License.

RELATIONSHIP TO OTHER STUDIES

Results of this study will be used in conjunction with other recreation and traffic studies to determine Project's recreational opportunities as compared to regional opportunities.

LEVEL OF EFFORT AND COST

The preliminary estimate considering time, personnel resources for data collection, data entry, analysis, Project licensing meetings, and reports is approximately \$25,000 (2004 dollars).

EXISTING INFORMATION

Existing information regarding recreation activities in the Project Area is provided in PG&E's PAD, Volume 1, and listed in the *References* section below. Limited information regarding regional uniqueness and significance of the Project Area's primary recreation opportunities is available. This study will be used to close the gaps in the existing information, and formulate projection of future use, and recommendations.

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ASSESS AND INVENTORY RECREATION USE IMPACTS/ASSESS IMPACTS OF OHV USE OF PROJECT LANDS

GOALS AND OBJECTIVES OF STUDY

This study would identify how Project recreation use is affecting lands and waters in the Project. Field visits and aerial photography would be used to identify the extent to which recreational vehicles, foot traffic, and other effects are impacting vegetation, soils and water resources in the Project Area. During field visits to developed recreation and user-created recreation areas, impacts and campfire rings would be inventoried and mapped. Areas of significant impact would be photographed. This information would be used to develop appropriate management strategies to address areas of significant impact (e.g. Philbrook Creek's Willows Area, and Round Valley Reservoir).

This study would further identify potential impacts from ORV/OHV use of Project lands. Information for this assessment would be derived from the recreation use impacts inventory and assessment and additional field inventory of Project lands. This information would be used to identify potential management solutions to reduce impacts from ORV/OHV use of project lands.

RELEVANT RESOURCE MANAGEMENT GOALS

These goals are from the Forest Land and Resource Management Plan:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information
- Provide interpretive services and facilities to inform the public about Forest resources and management.
- Make portions of developed sites accessible to the physically challenged
- Construct nature trails, photo blinds and interpretive sites where they enhance the recreation experience.
- When planning for rehabilitation of sites, plan for multiple or small group units
- Operate and manage facilities and access to protect natural site conditions and promote user convenience.

The paragraphs below are from the Forest Service Communication Plan for the 2004 National OHV Policy Proposed Rule, which provides an indication of the direction the FS is headed in relation to OHV management on NFSL:

Forces outside the Forest Service are driving the need for a change in off-highway vehicle (OHV) management. Impressive advances in motor vehicle technology coupled with the increased capability of motor vehicles to travel off flat, firm roads have created a very different landscape for OHV use over the past several decades. Whole new classes of vehicles that can travel off road – such as all-terrain vehicles (ATVs) and sport utility vehicles (SUVs) – are widely used and growing in popularity. While the line between street vehicle and OHV has blurred, the widespread use of OHV's on national forests continues to grow. While OHV use is

an important recreational activity on National Forest System lands, some OHV use resulted in undesirable use conflicts with natural and cultural resource impacts on National Forest System lands.

As a result, the Chief has identified unmanaged recreation, especially natural resource impacts from wheeled OHV's, as one of the key threats facing the nation's forests today. The Chief has expressed concern about the number of unplanned roads and trails, erosion, watershed and habitat degradation from unmanaged OHV use. The agency is proposing rule changes to create a contemporary policy to address this issue effectively at the field level.

Forest Service managers have discussed the need for a rule change with many external audiences. The Forest Service recognizes that motorized, nonmotorized, and other interest groups generally support the concept of motor vehicle use on designated roads, trails and areas. Recently, the National Association of Counties adopted a resolution supporting the Forest Service's development of new travel policies that require OHV's to stay on designated roads and trails and in designated areas. The agency will continue its strong collaborative partnerships with all these groups to obtain their support and input on the proposed rule. The Forest Service intends to coordinate its policy development with other federal and state land management agencies.

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIES AND HOW THE RESULTS WILL BE USED

Survey is needed to establish baseline information for current conditions, determine level of resource damage/concerns within the project boundary, and identify resource impacts and concerns at dispersed camping/day use and other undeveloped recreation areas/sites at least ½ mile from the project boundary and Project-affected stream reaches including: West Branch of the Feather River, other affected river reaches, Philbrook Creek (east and west of Philbrook Lake), Willows Area, Philbrook and Round Valley Reservoirs. This study will result in recommendations for management strategies at impacted sites for management of recreation opportunities, while providing recommendations for corrective actions including closures, installation of barriers, and increased law enforcement to restore and rehabilitate currently unmanaged recreation/ORV project induced within the project boundary.

STUDY AREA

At dispersed camping/day use and other undeveloped recreation areas/sites at least ½ mile from the project boundary and Project-affected stream reaches including: West Branch of the Feather River, other affected river reaches, Philbrook Creek (east and west of Philbrook Lake), Willows Area, Philbrook and Round Valley Reservoirs.

STUDY SITES

Same as above Study Areas

SCHEDULE

During the 2006 field season, starting in June through October.

METHODS

Using LAC (Limits of Acceptable Change) or similar protocol to document existing impacts to recreation areas and use sites. Establish photo points, document per cent of vegetation lost (including roads, social trails, damage to vegetations, sanitation concerns, water quality. Provide accurate GPS/GIS data, ideally with Geo-link to photos.

ANALYSIS

This study will result in recommendations for management strategies at impacted sites for management of recreation opportunities, while providing recommendations for corrective actions including closures, installation of barriers, increased law enforcements to restore and rehabilitate currently unmanaged recreation/ORV project induced impacts within the project boundary.

CONSISTENCY WITH GENERALLY ACCEPTED SCIENCE PRACTICE

Inventory, data collection and LAC monitoring are practices used by PG&E on other relicensing projects.

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meetings) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's application for new License.

RELATIONSHIP TO OTHER STUDIES

Results of this study will be used in conjunction with other recreation, traffic, and fire hazards/risk studies to determine appropriate management strategies resulting in a plan with recommendations that establish carrying capacity of Project facilities, recreation areas, dispersed, and OHV use areas. Study will identify existing and future needs for facilities, increased LE, closures and barrier installations to protect riparian, sensitive plants, soil, fisheries and other resource criteria.

LEVEL OF EFFORT AND COST

Cost of survey and associated plan is estimated between \$30,000 to \$50,000 (2004 dollars)

EXISTING INFORMATION

PG&E has existing user survey information covering several years.

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ASSESS ADEQUACY OF FLOWS FOR RIVER RECREATION OPPORTUNITY

GOALS AND OBJECTIVES OF STUDY

This study would assess to what extent Project operations affect flow dependent river recreation opportunities, and the needs for, and availability of, flow information for these uses. The primary flow dependent recreation activities would likely include kayaking, tubing, fishing, recreational mining, and swimming. To determine the acceptable and optimum flow ranges for each primary activity, Licensee would review information in guide books and the literature, and conduct interviews with key recreational users. Once the acceptable and optimum flow ranges are known, Licensee would evaluate Project effects on the availability of target river recreation opportunities using unimpaired and regulated flow information. Information from this assessment would be used to evaluate the need and potential adverse effects of such enhancements to other beneficial uses of the river resource.

RELEVANT RESOURCE MANAGEMENT GOALS

These goals are from the Forest Land and Resource Management Plan:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information.
- Provide interpretive services and facilities to inform the public about Forest resources and management.
- Make portions of developed sites accessible to the physically challenged.
- Construct nature trails, photo blinds and interpretive sites where they enhance the recreation experience.
- When planning for rehabilitation of sites, plan for multiple or small group units.
- Operate and manage facilities and access to protect natural site conditions and promote user convenience.

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIES AND HOW THE RESULTS WILL BE USED

This survey is needed to establish baseline information and opportunities throughout the Project for the current condition, including: adjacent NF Lands (Plumas and Lassen) at Philbrook and Round Valley Reservoirs, Philbrook Creek, and affected river reaches on the West Branch Feather River. This study will result in recommendations for management strategies for river recreation including identification of access routes to river opportunities (including put in and take out sites for boaters, tubers, etc).

This information is necessary since Project facilities (i.e. Philbrook and Round Valley Reservoirs) and Project-affected stream reaches (i.e. Philbrook Creek and WBFR) are on or adjacent to NFSL and can cause effects to the lands and resources of the forests'. For example, whitewater boating put-in/take outs, picnic areas, swimming, dispersed camping, angling, and other recreation uses associated with Project waters can cause disturbance of vegetation, compaction of soils, increase fire starts, induce litter and

sanitation issues, create conflicts between users necessitating law enforcement actions, and other effects. This study would provide some baseline information from which these effects within the project boundary could be analyzed.

STUDY AREA

Within the project boundary, around Philbrook Lake, Round Valley (Snag Lake) Reservoirs, and affected reaches of the West Branch Feather River, Butte Creek, and Philbrook Creek. Identification of access routes to and evaluation of put in and take out sites will be identified.

STUDY SITES

Extent of study will be determined in consultation with PG&E and interested parties.

SCHEDULE

Develop projections of recreation use and demand in 2006.

METHODS

Standard methodologies used in numerous previous relicensings to project river recreation opportunities. Consultation with American Whitewater representatives and local user groups (Chico Paddleheads, Shasta Paddlers) will provide additional data on existing whitewater boating usage.

CONSISTENCY WITH GENERALLY ACCEPTED SCIENCE PRACTICE

This study is consistent with standard accepted protocols as described in: *Instream Flows for Recreation: A Handbook on Concepts and Methods* (Whittaker, Shelby, Jackson & Beschta, 1993). Additionally, various guidebooks provide additional information.

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meetings) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's application for new License.

RELATIONSHIP TO OTHER STUDIES

Results of this study will be used in conjunction with other recreation and traffic studies to determine opportunities, and the location and need for access to put in and take out locations throughout the Project area.

LEVEL OF EFFORT AND COST

Estimated cost of this study is between \$10,000 and \$30,000 (2004 dollars).

EXISTING INFORMATION

Existing information regarding activities in the Project Area is provided in PG&E's PAD, Volume 1. Limited information regarding river recreation opportunities is available. This study will be used to close the gaps in the existing information and formulate projected use scenarios.

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Wilderness Recreation Use: A Handbook of Methods and Systems, October 2000, Forest Service RMRS GTR-56 (page 57 -59, Field Sampling Strategy, Method J, The General Recreation Survey, and Method A: Mechanical Counters with Visual Calibration)

ASSESS FIRE HAZARDS FROM PROJECT-INDUCED RECREATION

GOALS AND OBJECTIVES OF STUDY

This study proposes to identify potential fire hazards from Project-induced recreation. Information from this assessment would be developed from the recreation use impact inventory and assessment in conjunction with fire history data (ignitions and fire size classes), fire suppression resource response times and capabilities, and an assessment of existing fuel loading and vegetation profiles within the affected project area. This information would be used to recommend appropriate measures to reduce significant fire hazards related to Project-induced recreation use. The information is also intended to help Licensing Participants address the following specific Project-related issues.

- Potential for the development of high intensity and severity fire in and adjacent to the recreational residences developed and undeveloped dispersed recreational sites.
- Potential fire spread to and effects on recreational residences, developed and undeveloped dispersed recreational sites, and private and National Forest System lands.
- Adequacy of hazard fuel abatement and defensible space at recreational residences and developed and undeveloped dispersed recreational sites.
- Adequacy of fire prevention, education and enforcement efforts at recreational residences and developed and undeveloped dispersed recreational sites.
- Adequacy of fire suppression resource response times and effectiveness associated with existing fuel loadings and vegetation profiles.

RELEVANT RESOURCE MANAGEMENT GOALS

These goals are from the Forest Land and Resource Management Plan:

- Rely on fuel reduction and an effective fire protection organization to minimize wildfire losses.
- Promote fire prevention commensurate with resource values at risk.
- Design prevention efforts to minimize human-caused wildfires and unacceptable resource value change.
- Cooperate with other agencies, and utilize the "closest forces" concept for fire suppression.
- Take presuppression and suppression actions that protect life and property, and minimize resource degradation.
- Reduce fuels by prescribing fire and allowing biomass use, while maintaining soil and water quality.

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIED AND HOW THE RESULTS WILL BE USED

Project reservoirs and roads provide specific recreational opportunities and access associated with the establishment of recreational residences and developed and undeveloped dispersed recreational sites. These recreation sites and associated human activities have created a need for managing the risk of fire related issues and concerns. Specifically, project reservoirs and roads have induced the development of recreational residences, developed and undeveloped dispersed recreational camping, and day use sites near the West Branch of the Feather River, Philbrook Creek and Philbrook and Round Valley Reservoirs. The existence of these recreational sites in conjunction with associated recreation induced activities (i.e. campfires, smoking, OHV use, shooting, etc.) impact human caused fire ignitions in these focused locations. unmitigated natural and human caused vegetation (fuel) accumulation from wind thrown timber, needle litter, diseased and insect infested timber, and hazard tree abatement activities have produced excessive fuel loadings within these recreational areas. The combination of recreation induced human activities associated with fire ignitions and excessive fuel loadings and profiles within and adjacent to recreational sites presents an increased risk of high intensity and severity fire in the project area. The risk of high intensity and severity fire within these recreational areas have the potential to adversely impact lives, property and resources, including those within NFSL adjacent to these areas.

STUDY AREA

On private and NFSL within ¼ mile of the Philbrook and Round Valley Reservoir shorelines

STUDY SITES

- Philbrook Lake (Residences and Camping/Day Use Facilities)
- Round Valley Lake (Dispersed Undeveloped Camping and Day Use sites)
- Willows (Dispersed Undeveloped Camp Site)

SCHEDULE

To be completed in consultation with CDF and PG & E.

METHODS

General methodology would include collecting and identifying recreation use impact inventory and assessment information, area specific fire history data, fuel loadings and profiles, modeled fire behavior under various historic weather data sets and suppression resource response and effectiveness. This information would be used to help determine potential fire ignition frequency and intensity, severity and size given an ignition source within the study area. It would also be used to help identify measures and treatments to mitigate the areas fire risk and hazard.

ANALYSIS

Fire history data would be analyzed to determine the average frequency, specific causes and sizes of fires to help determine the areas risk of fire ignition and spread. Fuel loading and vegetation profile data would be collected in conjunction with area specific historic weather data sets and topography (slope) to project fire behavior and severity given an ignition source within the study area. Finally, suppression resource response and production rates would be analyzed in conjunction with projected fire behavior to help determine suppression effectiveness and probable fire size after completed suppression activities. The resultant information from these analyses could be utilized to help develop specific fuels and prevention mitigation measures for the study area.

CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

The proposed methodology is consistent with common fire and fuels project specific analysis practices.

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meeting) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's Application for new License.

RELATIONSHIP TO OTHER STUDIES

This study corresponds with the assessment of potential fire hazard goals and objectives identified in Study Plan 6.3.6-1 ASSESS EXISTING RECREATION USE AND DEMAND IN THE PROJECT AREA.

LEVEL OF EFFORT AND COST

Based on possible inter-fire agency involvement in the development and analysis required for this study an estimated cost of \$10,000 - \$20,000 is expected.

EXISTING INFORMATION

Based on professional ocular inventory of fuel loadings and vegetation profiles in the area of Philbrook Reservoir, it has been identified as a location of excessive fuel loading in close proximity to private recreational residences, camping/day-use facilities and NFSL. The existing fuels condition coupled with focused recreational activities and fire

suppression response times (average 20-40 minutes) increase this areas risk to the development of high intensity and severity fire.

In July 2004, the FS provided historical fire occurrence data to the Licensee for lands on which the FS has fire responsibilities.

REFERENCES

- USFS. 1992. Land and Resource Management Plan, Lassen National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.
- USFS. 1988. Land and Resource Management Plan, Plumas National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.

ASSESS PROJECT RECREATION NEEDS

GOALS AND OBJECTIVES OF STUDY

This study would compare Project recreation demand and supply to identify imbalances in Project recreation needs. Project Area recreation demand information would largely be derived from results from the existing and projected recreation use and demand studies, the visitor questionnaire, and regional recreation study. (This study could potentially be combined with one of these studies). The recreation supply information would largely be derived from the recreation suitability, capacity, and regional studies. This comparison would result in identification of potentially needed recreation facilities and management actions that, along with other resource considerations, would be used to identify potential recreation opportunities enhancements.

RELEVANT RESOURCE MANAGEMENT GOALS

Land and Resources Management Plan Direction:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information
- Provide interpretive services and facilities to inform the public about Forest resources and management.
- Make portions of developed sites accessible to the physically challenged
- Construct nature trails, photo blinds and interpretive sites where they enhance the recreation experience.
- · When planning for rehabilitation of sites, plan for multiple or small group units
- Operate and manage facilities and access to protect natural site conditions and promote user convenience.

Additionally, Forest Service policy on the following two programs is relevant:

- Recreation Opportunity Spectrum
- Meaningful Measures Standards

The Following additional study is also relevant to the resource goals of this study:

• Statewide Comprehensive Outdoor Recreation Plan (SCORP)

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIED AND HOW THE RESULTS WILL BE USED

With the expected population growth of the State and the paving of the Skyway Road (a major access to the upper Project reservoirs and reaches), recreational use of the Project Area and vicinity is expected to increase, perhaps substantially. If increasing use is not properly managed it can result in damage to resources within the project boundary (e.g., soil compaction, vegetation loss, litter, sanitation/health issues, tree mortality, public safety, increased fire hazard, etc.). This Survey is needed to address the gap between supply of existing recreation opportunities and the demand for needed facilities and

management actions. This study will pull from a wide variety of other recreation studies for information to provide a snap shot of recreation needs for the project.

STUDY AREA

Within the project boundary and on affected National Forest System Lands (Plumas and Lassen NF), Round Valley Reservoirs, and affected reaches of the West Brach Feather River and Philbrook Creek.

STUDY SITES

Exact extent of the study sites to be determined in consultation with PG&E and interested parties.

SCHEDULE

Complete this study during the summer of 2006.

METHODS

Details will be developed at April/May collaborative meetings.

ANALYSIS

Gather and analyze study results from the various recreation studies to provide a snap shot of recreation needs for the project for the life of the new license.

CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

PG&E has well established practices for this study in recent relicensing projects for both the Lassen and Plumas National Forests.

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meeting) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's Application for new License.

RELATIONSHIP TO OTHER STUDIES

Results of this study will be used in conjunction with other recreation and traffic studies to determine Project's recreational supply and demand opportunities for the Project.

LEVEL OF EFFORT AND COST

The preliminary estimate is approximately \$25,000 (2004 dollars), considering time needed for personnel resources for data collection, data entry, analysis, Project licensing meetings, and reports.

EXISTING INFORMATION

Existing information regarding recreation activities in the Project Area is provided in PG&E's PAD, Volume 1, and listed in the References section below. Limited information regarding Project recreation needs is available. This study will be used to close the gaps in the existing information and formulate projection of future use and recommendations.

REFERENCES

- Angler Survey Methods and Their Applications in Fisheries Management, American Fisheries Society, 1994. Polloock, Jones, and Brown. (Chapter 11, Roving Creel Survey).
- Butte Creek Watershed Conservancy (BCWC). 2000a. Existing Conditions Report. Prepared by the Office of Watershed Projects, California State University, Chico Research Foundation.
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- Techniques and Equipment for Gathering Visitor Use Data on Recreation Sites (Personal Observation, page 23 -25; Traffic Counters, page 19-23; and Visitor Surveys, page 35-37).

- Tuthill, Bill. 1997-2004. California Creekin'. A Whitewater and Touring Guide to California: Butte Creek near Chico. Website: http://www.creekin.net/butte-cr.htm (accessed on 06/22/04).
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- U.S. Department of the Interior, Bureau of Land Management. 1990. Forks of Butte Recreation Area Management Plan. U.S. Department of the Interior, Bureau of Land Management. Redding, CA
- U.S. Department of Agriculture, Lassen National Forest: Recreation Activities http://www.fs.fed.us/r5/lassen/recreation/
- U.S. Department of Agriculture, Plumas National Forest: Recreation Activities http://www.fs.fed.us/r5/plumas/recreation/
- USFS. 1992. Land and Resource Management Plan, Lassen National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.
- USFS. 1988. Land and Resource Management Plan, Plumas National Forest. United States Department of Agriculture, Forest Service, Pacific Southwest Region.
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Section II

Comments on 2005 Preliminary Study Plans 1/25/05

Section II provides National Park Service comments on the two recreation studies for which PG&E developed a preliminary plan in order to expedite their review in anticipation of implementation during the 2005 study season. These preliminary studies address FERC study request CFR points applicable to PG&E. Since PG&E is not a resource agency, they were not required to address point 2 from the FERC's CFR's. However, at the January 6, 2005 collaborative meeting with the FERC, Licensee, and other interested parties, the FERC agreed that interested parties providing comments directly into PG&E's preliminary plans would be most efficient. The National Park Service used the "tracking" tool to show edits in color and also underlined and with a vertical line in the left margin for black and white printing.

In reviewing these preliminary plans, the National Park Service noticed one concerns that is common to both preliminary recreation studies:

Methodologies: Methodologies outlined in both of the recreation studies are not detailed enough to provide specific comments. As the Licensee develops more specific iterations of these study plans, the National Park Service will be able to provide more specific comments. The lack of a comment at this early stage may be related to the lack of specificity in the study plan and not to our lack of concern. We look forward to receiving more defined methodologies prior to our April and May, 2005 collaborative study plan meetings.

Study Plan 6.3.6-1 ASSESS EXISTING RECREATION USE AND DEMAND IN THE PROJECT AREA

GOALS AND OBJECTIVES OF STUDY

The study will identify the amount, activity type, and spatial and temporal distribution of existing recreation use within Pacific Gas and Electric Company's (PG&E's or Licensee's) DeSabla-Centerville Hydroelectric Project, FERC No. 803 (Project) Area (Project Area¹) [Concern, as expressed elsewhere that project area may be insufficient coverage to address all concerns and unclear if it covers Philbrook Res/creek.]. The study will also assess if recreation opportunities with high existing regional latent (unmet) demand are significantly affected by existing Project operations or management.

The recreation use and demand assessment will provide participants in the relicensing proceeding (Licensing Participants²) with supplemental existing use information for Project areas where existing use information has not been recently collected. Areas with good existing use information include Philbrook Reservoir and DeSabla Forebay, while areas without good existing use information include the Project canals, powerhouses, and affected river stream [consistent w/ other wording and since 1 river and 1 creek.] reaches. In addition, information on existing recreation opportunities with high statewide latent demand is available in the California 2002 Public Opinions and Attitudes in Outdoor Recreational (POAOR) Survey (CDPR, 2003).

The information is also intended to help Licensing Participants address the following specific Project-related issues³:

- Potential effects on Project recreation use and resources from U. S. Forest Service (USFS) off-road vehicle area adjacent to the Project
- Potential effects on dispersed recreation at Round Valley Reservoir and the WBFR downstream due to the proximity of Butte County's Humbug Summit Road
- Adequacy of whitewater boating access on Project–affected stream reaches, particularly at DeSabla and Centerville powerhouses
- Adequacy of recreation facilities to meet projected Project-induced recreation demand over the term of the license
- Potential effects of closure of USFS West Branch Campground on level of use at the Project's Philbrook Campground
- Appropriateness of streamflows for whitewater boating, fishing, swimming, and recreational mining on Project-affected stream reaches

Project Area as defined in Pacific Gas &Electric Company's DeSabla-Centerville Hydroelectric Project, FERC Project No. 803, Pre-Application Document (PAD) Volume 1 – Public Information, dated October 4, 2004.

² FERC, Federal and state resource agencies, local governments, Indian tribes, members of the public, and others likely to be interested in the licensing proceeding.

³ Reference PG&E's PAD Volume 1, dated October 4, 2004, Section 6.2.

• Potential fire hazards from dispersed <u>and developed</u> recreation use <u>including cabins at</u> Philbrook Reservoir.

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIED AND HOW THE RESULTS WILL BE USED

Project reservoirs, roads, and canals provide opportunities for the public to participate in various recreation activities in the Project Area. This has created a need for managing recreation resources to provide recreation facilities and minimize potential resource impacts that may result from recreation use. In addition, Project operation has the potential to affect participation levels and experiences in water dependent recreation opportunities (i.e. fishing, boating, and swimming) at Project reservoirs and in the Project-affected stream reaches.

The recreation use and demand assessment results in conjunction with results from other relicensing studies will be used to help Licensing Participants assess the adequacy of existing protection, mitigation, and enhancement measures (PM&Es).

STUDY AREA

The study area includes Round Valley Reservoir, canals, powerhouses, and Project-affected river stream reaches within the Project Area.

STUDY SITES

Licensee proposes to collect existing recreation use information at the sites contained in Table 1 below. Licensee will conduct a field reconnaissance survey, review available aerial photography, and consult with Licensing Participants to determine if additional sites should be added or deleted from this list of proposed recreation survey sites.

Table 1: Recreation Survey Sites, Project Locations and Project-affected river reaches

Project Locations	Recreation Survey Site(s)
Round Valley Reservoir	Shoreline Areas Reservoir Water Surface
Hendricks/Toadtown Canal	Informal access locations to be identified during field reconnaissance survey
Butte Canal	Informal access locations to be identified during field reconnaissance survey
DeSabla Powerhouse (Ph)	Powerhouse gate – may being used by public as an informal trailhead access to the powerhouse shoreline.
Lower Centerville Canal	Informal access locations to be identified during field reconnaissance survey

Project Locations	Recreation Survey Site(s)
Upper Centerville Canal	Informal access locations to be identified during field reconnaissance survey
Centerville Powerhouse (Ph)	Coleman Ranch Road gate – is used by public as an informal trailhead to the powerhouse shoreline.
	Powerhouse Shoreline
Project-affected River Reach	Recreation Survey Site(s)
Philbrook Creek	Below Philbrook Dam
	West Branch Campground Dispsed Area, Upstream
	Willows dispersed area (unless PG&E report data collected as
	per "Existing Information" section) meets needs.
Upper West Branch Feather River	FS Lands below Round Valley Dam
	Coon Hollow Wildlife Area
	FS Lands between Coon Hollow WA and W Branch Campground
	West Branch Campground Dispersed Area
	Brown Ravine Road
	Hendricks Head Dam (Reston Rd) to Fish Creek
Lower West Branch Feather River	Hendricks Head Dam to Retson Camp
	Whiskey Flat (Jordon Hill Road Crossing)
	Plumas National Forest parcels
Butte Creek	
Butte Creek Diversion Dam to DeSabla Ph	Ditch Creek Road
	Kolar Road
	Doe Mill Bridge
	BLM Butte Creek Trailhead, Northern (Ponderosa Way
	Bridge)
	BLM Butte Creek Trailhead, Southern (DeSabla Road)
DeSabla Ph to Centerville Ph	Whiskey Flat
Centerville Ph to Parrot-Phelan Diversion	Centerville Bridge

SCHEDULE

Field work preparations will be conducted during winter to summer 2005 and field work will be conducted from fall of 2005 through the winter of 2006 and will include the steelhead, general fishing, and summer recreation seasons. [Concern of only 1 year of data for recreation use that may be affected by weather, gas prices, and other factors. If adequate time, study some uses (e.g. angling) that are more subject to change for both '05 and '06 seasons.] Table 2 below identifies which recreation resource areas will be surveyed during which season. Field

data will be analyzed during the fall 2006; results will be integrated with results from other studies in winter 2006; and then written-up in spring 2007.

Table 2: Field Survey Schedule

RECREATION RESOURCE AREAS

	T		Butte Creek			
	WBFR and Philbrook Creek	Project Canals	Diversion Dam to DeSabla PH	DeSabla PH to Centerville PH	Centerville PH to Parrot Phelan Diversion	Round Valley Reservoir
Trout Fishing Season (Fall '05 & Spring-Summer '06)						
Steelhead Fishing Season (Mid-Nov '05 to Mid-Feb '06)						
Summer (After snow melt to early Sept 2006)						

METHODS

Licensee will prepare for field work during winter through summer 2005. Field work preparation will include field verification and identification of potential recreation sites of popular recreation use, general assessment of existing recreation use for refining proposed sampling frequencies (see below), figuring out surveying logistics (i.e. travel times between survey sites and exact number of surveyors), and training of survey personnel.

To capture recreation use along shorelines of rivers, canals, and reservoirs and on water surface of reservoirs, Licensee proposes a roving survey approach frequently used for creel and general recreation surveys. This method uses a stratified two-stage probability sampling approach. Under this approach, the study area is divided into sub-geographic areas (the recreation resource areas identified in Table 2 above) and the recreation seasons are stratified into weekdays, non-holiday weekends, holiday weekends, and opening fishing weekends. These day types are further stratified into periods of the day. For creel surveys, morning period (6 am to noon) and afternoon periods (noon to 6 pm) are generally used, while Licensee previous Project recreation surveys used morning (8 am to noon), afternoon (noon to 4 pm), and evening (4 pm to 8 pm) as survey time periods. After Licensee conducts an initial field reconnaissance to assess travel times within and between recreation resource areas, use levels, user arrival times, and departure times, Licensee will propose an appropriate stratification of the day for the survey. Licensee currently anticipates sampling at least one random weekday and two random Saturdays per month and Saturdays during holiday and opening fishing season weekends during an areas recreation season.

Recreation parameters to be recorded at surveyed recreation sites include observed number of vehicles, trailers, boats, people, day groups, overnight groups, and the types of activities at each recreation. The recreation surveyor (or survey companion) will also be administering a recreation visitor questionnaire (Questionnaire) to randomly selected recreation visitors as part of Study Plan 6.3.6-31, Survey Recreation Visitor Characteristics, Preferences, and Attitudes in the Project Area. Licensee will consider the feasibility of placing an inexpensive traffic or a trail counter at popular recreation sites that are primarily used for recreation, have a single access road or trail, and will likely experience low levels of vandalism.

To capture whitewater/tubing use that occurs on Butte Creek downstream of Centerville Powerhouse, Licensee proposes to count the number and type of watercraft passing by an appropriate shoreline location during the summer survey days identified above. Based on existing recreation use information, Licensee does not propose conducting similar whitewater counts due to the infrequent nature of whitewater boating on other Project-affected stream reaches. [Some indication of current use of WWB is needed. If not specific counts due to the erratic nature of this use, possibly working w/ local WWB groups to get at numbers and locations of use to determine if affecting NFSL. We've heard Whiskey Flat (BLM) is a put-in, take-out location.]

Existing recreation use does not always represent the total existing recreation demand at a recreation area because there may be constraints that limit participation in desired recreation opportunities. Examples of these constraints may include limited access opportunities, Project operations that may diminish the quality or eliminate a recreation opportunity, or limited knowledge of the recreation opportunities available at the recreation area. To fully understand existing recreation demand for Project Area recreation resources, the Licensee will review existing regional recreation demand information contained in available local, state (i.e. California PAOR Survey), and national reports (i.e. Cordel, 1999, 2004) and latent (unmet demand) information obtained from the Questionnaire survey. Additionally, local law enforcement agencies will be contacted to discern the pattern of law enforcement trends associated with Project-induced recreation. [Also, just a note that PG&E is to attempt to contact local county staff to encourage participation at the recreation meetings to address concerns that overlap their jurisdiction.]

ANALYSIS

For each recreation site or cluster of dispersed sites, Licensee will <u>provide actual user counts and then</u> calculate the average and maximums for the observed recreation parameters (i.e. people, vehicles, groups) by day type (i.e. weekend, weekday, <u>holiday</u>) and time period (i.e. morning, <u>afternoon, evening</u>) during the surveyed recreation season. In addition for each recreation site or cluster of sites, Licensee will calculate the frequency distribution of observed recreation activities during the surveyed recreation season. For recreation sites that a traffic or trail counter may be placed, Licensee will <u>provide actual use counts and then</u> calculate average daily traffic by day type [Specific counter site locations need to be discussed collaboratively.]. From a recreation demand perspective, relevant, fresh water related recreation activities with significant unmet regional recreation demand and which are significantly affected by Project operations or

management will be identified and Licensee will assess if the Project could reasonably be modified to accommodate these opportunities.

The analysis will also include an estimate of existing annual day and overnight visits to the recreation resource areas in recreation-days (RDs). A RD, as defined by FERC, equals a visit to an area for recreation purposes for any portion of a 24 hour period. To estimate RDs, Licensee will use information on group size, number people in vehicles, and length of stay derived from the Questionnaire survey used in Study Plan 6.3.6-3.

This analysis will incorporate data gathered from this study, as well as known recreation use information shown under the "Existing Information" section, and other Project-induced recreation such as the cabins at both Philbrook Reservoir and DeSabla Forebay. This will provide one comprehensive analysis of all of the existing recreation use and demand in one report for decision making purposes.

CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

Assessing existing recreation use through a combination of observation and questionnaire surveys is a common practice for large geographic areas that contain multiple accesses to desired recreation use areas. In addition, traffic or trail counters are also frequently used for recreation sites with a single access route. Information on these methods is contained the following sources:

- Wilderness Recreation Use: A Handbook of Methods and Systems, October 2000, National Park Service RMRS GTR-56 (page 57 -59, Field Sampling Strategy, Method J, The General Recreation Survey, and Method A: Mechanical Counters with Visual Calibration)
- Techniques and Equipment for Gathering Visitor Use Data on Recreation Sites (Personal Observation, page 23 -25; Traffic Counters, page 19-23; and Visitor Surveys, page 35-37).
- Angler Survey Methods and Their Applications in Fisheries Management, American Fisheries Society, 1994. Polloock, Jones, and Brown. (Chapter 11, Roving Creel Survey).
- Fisheries Techniques, 2nd edition. American Fisheries Society 1996. (Chapter 120, Sampling the Recreational Creel, Malvestuto, Stephen P.).

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meetings) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's Application for new License, Exhibit E.

There are both private and public PG&E recreational facilities induced by the Project; this study should acknowledge and assess projected recreation use and demand associated with all of

these facilities. The overnight facilities include: 1) the 20 site public Philbrook Campground at Philbrook Reservoir, 2) 42 private cabins on PG&E land at Philbrook Reservoir, and 3) 17 PG&E private organizational cabins at DeSabla Forebay. Assessing the entire spectrum of facilities induced by the Project, whether public or private, will better assess the projected recreational use and demand.

RELATIONSHIP TO OTHER STUDIES

This study is interrelated with other studies from both an implementation and results perspectives. From an implementation perspective, aerial photography can help identify areas of user created recreation use areas to be surveyed and the questionnaire survey will in most cases be conducted by the same surveyor who is observing and recording existing recreation use. In addition, the existing use study results will be used in the recreation use impact, projected recreation use, fire hazard, recreation need, visual sensitivity, and, if needed, carrying capacity study assessments.

LEVEL OF EFFORT AND COST

The Licensee's preliminary estimate considering time and personnel resources for field preparation, field work, data entry, data analysis, Project licensing meetings, and reports, is approximately \$75,000 (2004 dollars).

EXISTING INFORMATION

Existing recreation use information between 1997 and 2002 is available for the below recreation areas. This information is contained in the PAD or Licensee's 2002 DeSabla-Centerville Project Recreation Use Monitoring Plan Report.

Philbrook Reservoir

- Angler Access
- Campground
- Picnic Area and Camping Overflow Area
- Willows Dispersed Area
- Boating on water surface

DeSabla Foreabay

- East Shore Parking Area
- Group Picnic Area
- Picnic Area and Camping Overflow Area
- PSEA DeSabla Camp
- Boating on water surface
- Several locations along Hendricks-Toadtown Canal

BLM Butte Creek Trailhead

As part of the Project existing monitoring plan, Licensee will collect existing use information at Philbrook Reservoir and DeSabla Forebay in 2004 and will continue to collect information through the end of the existing license period. This information will be included in the comprehensive recreation use and demand report resulting from this study.

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- Butte Creek Watershed Conservancy (BCWC). 2000a. Existing Conditions Report. Prepared by the Office of Watershed Projects, California State University, Chico Research Foundation.
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Study Plan 6.3.6-3

survey recreation Visitor Characteristics, Preferences, and Attitudes in the project area

GOALS AND OBJECTIVES OF STUDY

This study proposes to use a recreation visitor questionnaire (Questionnaire) to collect characteristics, attitudes, and preference information of recreation visitors (e.g. anglers, boaters, hikers, campers, picnickers) participating in recreation activities in Pacific Gas and Electric Company's (PG&E's or Licensee's) DeSabla-Centerville Hydroelectric Project [IF only sampling among users already at the Project, you will not gain any information as to why people aren't using the area. We propose you expand questionnaire sampling to include local recreation shops, outdoor rec. clubs, or other local interest groups to get at this question. Also, a different survey or method (i.e. focus group meetings, etc.) are needed to talk with the locally affected community who live in and around PG&E facilities on a daily basis.], FERC No. 803 (Project) Area (Project Area⁴) [Project area may not be a sufficient area for sampling.]. The Questionnaire will provide participants in the relicensing process (Licensing Participants⁵) with information to help identify Project-related needs relative to recreational facilities, informal recreation use areas, existing and potential recreational opportunities and Project operational affects. The information is also intended to help Licensing Participants address the following specific Project-related issues⁶:

- Adequacy of whitewater boating access on Project–affected⁷ stream reaches, particularly at DeSabla and Centerville powerhouses
- Adequacy of recreation facilities to meet projected Project-induced recreation demand over the term of the license
- Potential effects of closure of U. S Forest Service (USFS) West Branch Campground on level of use at Project's Philbrook Campground
- Appropriateness of streamflows for whitewater boating, fishing, swimming, and recreational mining on Project-affected stream reaches
- Appropriateness of existing Project-related interpretive and education/recreation signs
- Potential for development or enhancement of scenic overlooks

NEXUS BETWEEN PROJECT AND RESOURCE TO BE STUDIED AND HOW THE RESULTS WILL BE USED

Project reservoirs, <u>affected stream reaches</u>, roads, and canals provide opportunities for the public to participate in various recreation activities in the Project Area. This has created a need for

⁴ Project Area as defined in Pacific Gas &Electric Company's DeSabla-Centerville Hydroelectric Project, FERC Project No. 803, Pre-Application Document (PAD) Volume 1 – Public Information, dated October 4, 2004.

⁵ FERC, Federal and state resource agencies, local governments, Indian tribes, members of the public, and others likely to be interested in the licensing proceeding.

⁶ Reference PG&E's PAD Volume 1, dated October 4, 2004, Section 6.2.

⁷ Project-affected as defined in PG&E's PAD Volume 1, dated October 4, 2004.

managing recreation resources to provide recreation facilities and to minimize potential resource impacts that may result from recreation use. In addition, Project operations have the potential to affect participation levels and experiences in flow dependent recreation opportunities (i.e. fishing, boating, and swimming) in the Project-affected stream reaches. Information from this study will allow Licensing Participants to assess the adequacy of existing protection, mitigation, and enhancement measures (PM&Es).

STUDY AREA

The study area includes the waters and shorelines of the Project Area.

STUDY SITES

Licensee proposes to collect questionnaire information at the sites listed in Table 1 below. Licensee will conduct a field reconnaissance survey, review available aerial photography, and consult with key recreation users and stakeholders to determine if sites should be added or deleted from this list.

Table 1: Recreation Survey Sites, Project Locations and Project-affected river reaches

Project Locations	Recreation Survey Site(s)
Round Valley Reservoir	Shoreline Areas
Philbrook Reservoir	Angler Access
1 mill ook reser von	Campground
	Picnic Area and Camp Overflow
	Willows Area
Hendricks/Toadtown Canal	Informal access locations to be identified during field reconnaissance survey
DeSabla Forebay	Shoreline Parking Areas
·	PSEA Camp De Sabla
	DeSabla Group Picnic Area
Butte Canal	Informal access locations to be identified during field reconnaissance survey
DeSabla Powerhouse	Powerhouse gate – may being used by public as an informal trailhead access to the powerhouse shoreline.
Lower Centerville Canal	Informal access locations to be identified during field reconnaissance survey
Upper Centerville Canal	Informal access locations to be identified during field reconnaissance survey
Centerville Powerhouse	Coleman Ranch Road gate – is used by public as an informal trailhead to the powerhouse shoreline.

Project Locations	Recreation Survey Site(s)
	Powerhouse Shoreline
Project-affected River Reach	Recreation Survey Site(s)
Philbrook Creek	Below Philbrook Dam
	West Branch Campground, Upstream
Upper West Branch Feather River	FS Lands belwow Round Valley Dam Coon Hollow Wildlife Area FS Lands between Coon Hollow WA and W Branch Campground West Branch Campground Dispersed Area Brown Ravine Road Hendricks Head Dam (Reston Rd) to Fish Creek
Lower West Branch Feather River	Hendricks Head Dam to Retson Camp Whiskey Flat (Jordon Hill Road Crossing) Plumas National Forest (need to discuss if access point)
Butte Creek	
Butte Creek Diversion Dam to DeSabla Ph	Ditch Creek Road Kolar Road Doe Mill Bridge BLM Butte Creek Trailhead, Northern (Ponderosa Way Bridge) BLM Butte Creek Trailhead, Southern (DeSabla Road)
DeSabla PH to Centerville PH	Whiskey Flat
Centerville PH to Parrot-Phelann Diversion	Centerville Bridge Honey Run Bridge Butte Creek Canyon Ecological Reserve

SCHEDULE

Field work preparations will be conducted during winter to summer 2005 and field work will be conducted from fall of 2005 through the winter of 2006 and will include the steelhead, general fishing, and summer recreation seasons. Table 2 below identifies which recreation resource areas will be surveyed during which season. Field data will be analyzed during the fall 2006; results will be integrated with results from other studies in winter 2006; and then written-up in spring 2007.

Table 2: Field Survey Schedule

				Butte Cre	ek	
	WBFR and Philbrook Creek	DeSabla Forebay and Project Canals	Diversion Dam to DeSabla PH	DeSabla PH to Centerville PH	Centerville PH to Parrot Phelan Diversion	Round Valley and Philbrook Reservoirs
Trout Fishing Season (Fall '05 & Spring-Summer '06)						
Steelhead Fishing Season (Mid-Nov '05 to Mid-Feb '06)						
Summer (After snow melt to early Sept 2006)						

METHODS

The Questionnaire survey will collect characteristics, attitudes, and preference information of recreation visitors (e.g. anglers, boaters, hikers, campers, picnickers) participating in recreation activities in the Project Area. [Questionnaire needs to address questions on user safety and interpretation as well as use.] The Questionnaire will be developed in consultation with Licensing Participants and will provide a better understanding of how recreation visitors perceive recreational experiences, available recreation facilities, water and river levels, and recreation resource conditions. The Questionnaire survey will also collect basic information on visitor characteristics (i.e. number of people and vehicles per group) and length of stay, which will be used along with information from Study Plan 6.3.6-1 (Assess Existing Recreation Use and Demand in the Project Area) to develop estimates of Project Area visitation.

An interview and mail version of the Questionnaire survey will be developed to collect information from recreation visitors. At recreation sites where recreation visitors are readily visible and willing to participate, the interview Questionnaire survey will be administered and at recreation sites where recreation visitors are not present or are hard to find the mail Questionnaire survey will be left on vehicle windshields. During the recreation season for each resource area (see Table 2 above), The Questionnaire survey will be administered during 2 randomly selected non-holiday Saturdays per month and at least one randomly selected weekday per month In addition, Saturdays during summer holiday weekends, and opening fishing season weekends will be surveyed during the recreation seasons.

Licensee proposes to complete:

400 Questionnaire surveys for the Project Area. This will allow for a 95 percent confidence interval with a plus or minus 5 percent interval for responses to questions. The portion of completed surveys will reflect the proportion of recreation use among each of the Project recreation areas. [Discussion of adequacy of sample size. Provide information justifying 400 surveys and clarify these are returned/complete surveys, not 400 distributed.]

- 100 completed surveys for the Philbrook Reservoir and DeSabla Forebay. This will allow for a 95 percent confidence interval with a plus or minus 10 response interval for these two Project water bodies.
- 30 completed surveys for each of the Project affected river reaches on the West Branch Feather River and Butte Creek and for the Project canals, which will provide, for statistical analysis purposes, the minimum acceptable sample size for these areas. [Unclear what specific reaches will be surveyed, i.e. Philbrook Creek? How will these above 2 categories = 400 total surveys?]

ANALYSIS

Questionnaire survey responses will be analyzed in relation to a recreation resource area perspective (see Table 1) and a primary recreation activity perspective. Information will be presented in tabular or graph format that indicates the number and percent frequency of Questionnaire survey responses. Results of the Questionnaire survey will be used in conjunction with other Project relicensing studies. In particular, zip code information obtained from the Questionnaire survey will also be used in Study Plans 6.3.6-2 (Assess Projected Recreation Use and Demand in the Project Area) and 6.3.6-7 (Assess Regional Uniqueness and Significance of the Project Area's Primary Recreation Opportunities). Recreation visitor group size, vehicle type, length of stay, and desired recreation opportunities will be used in Study Plan 6.3.6-1 (Assess Existing Recreation Use and Demand in the Project Area). Social capacities will be used in Study Plan 6.3.6-6 (Assess Recreation Carrying Capacity of the Project Area), if this study is needed. Recreation visitor opinions about Project-affected river reach flow level will be use in Study Plan 6.3.6-9 (Assess Adequacy of Flows for River Recreation Opportunities).

CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

Licensee's proposed methodology for planning, implementing, and analyzing questionnaire surveys is consistent with professional recreation social science practices. For study reference purposes, License is using the methods in *How to Conduct Your Own Survey*, 1994. Salant and Dillman and in *Wilderness Recreation Use: A Handbook of Methods and Systems*, October 2000, National Park Service RMRS GTR-56 (Method J, The General Recreation Survey).

PRODUCTS

Study plan reporting requirements (initial and updated study reports and meetings) will be conducted within the timeframes set forth in 18 CFR Part 5. Periodic progress reports will be provided to Licensing Participants annually. At the conclusion of the study, a full report will be produced and inserted into the Licensee's Application for new License, Exhibit E.

RELATIONSHIP TO OTHER STUDIES

The field work for this study is being scheduled in conjunction with the existing use study field work; therefore, a change in the number and timing of existing use field work survey days will affect the questionnaire field work and potentially the ability to reach targets for completed

questionnaire surveys. Answers to proposed questions on the survey form will also be used in several other study assessments as described in the analysis section above. Eliminating these questions will likely affect the approach and/or results of these studies.

LEVEL OF EFFORT AND COST

The Licensee's preliminary estimate considering time and personnel resources for field preparation, field work, data entry, data analysis, Project licensing meetings, and reports, range between \$40,000 and \$100,000 (2004 dollars). The preliminary estimate considers the following assumptions:

- Questionnaire survey field work is performed in conjunction with surveys proposed for Study Plan 6.3.6-1 (Assess Existing Recreation Use and Demand in the Project Area)
- Questionnaire survey field work requires an additional surveyor in the higher use recreation areas (i.e. downstream of Centerville Powerhouse) and at the Philbrook Reservoir and DeSabla Forebay
- In low use recreation areas, one recreation surveyor likely can perform both the Questionnaire survey and the existing use survey for Study Plan 6.3.6-1.
- The logistics between the travel time, travel routes, work time, and number of surveys to jointly complete both the Questionnaire survey and the existing use survey for Study Plan 6.3.6-1 will be known during the winter and spring of 2005.

EXISTING INFORMATION

Existing information regarding recreation activities in the Project Area is provided in PG&E's PAD, Volume 1, and listed in the *References* section below. Limited information regarding recreation visitor characteristics, attitudes, and preference information of Project Area recreation visitors is available. This study will be used to close the gaps in the existing information.

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