

Appendix G

**Comments and Responses to the
Draft Environmental Impact Statement**

**CAMPBELL-CRAVEN
ENVIRONMENTAL CONSULTANTS**

Environmental Reports
Permit Coordination
Baseline Studies
Ecological Analyses

9170 SW Elrose
Tigard, Oregon 97224
Phone (503) 639-7200
FAX (503) 620-1657

December 10, 1990

File

Ms. Theresa Weber
Oregon Natural Heritage Data Base
1205 N.W. 25th Avenue
Portland Oregon 97210

**SUBJECT: Milltown Hill Project, Threatened and Endangered
Species Assessment.**

Dear Ms. Weber:

Campbell-Craven has been retained by Douglas County to evaluate the Milltown Hill project area and surrounding areas regarding the presence of threatened and endangered species of plants and animals. The project area is in Township T23S, Range R4W, Sections 3,9,10,15,16,21,22,27,28,33, and 34.

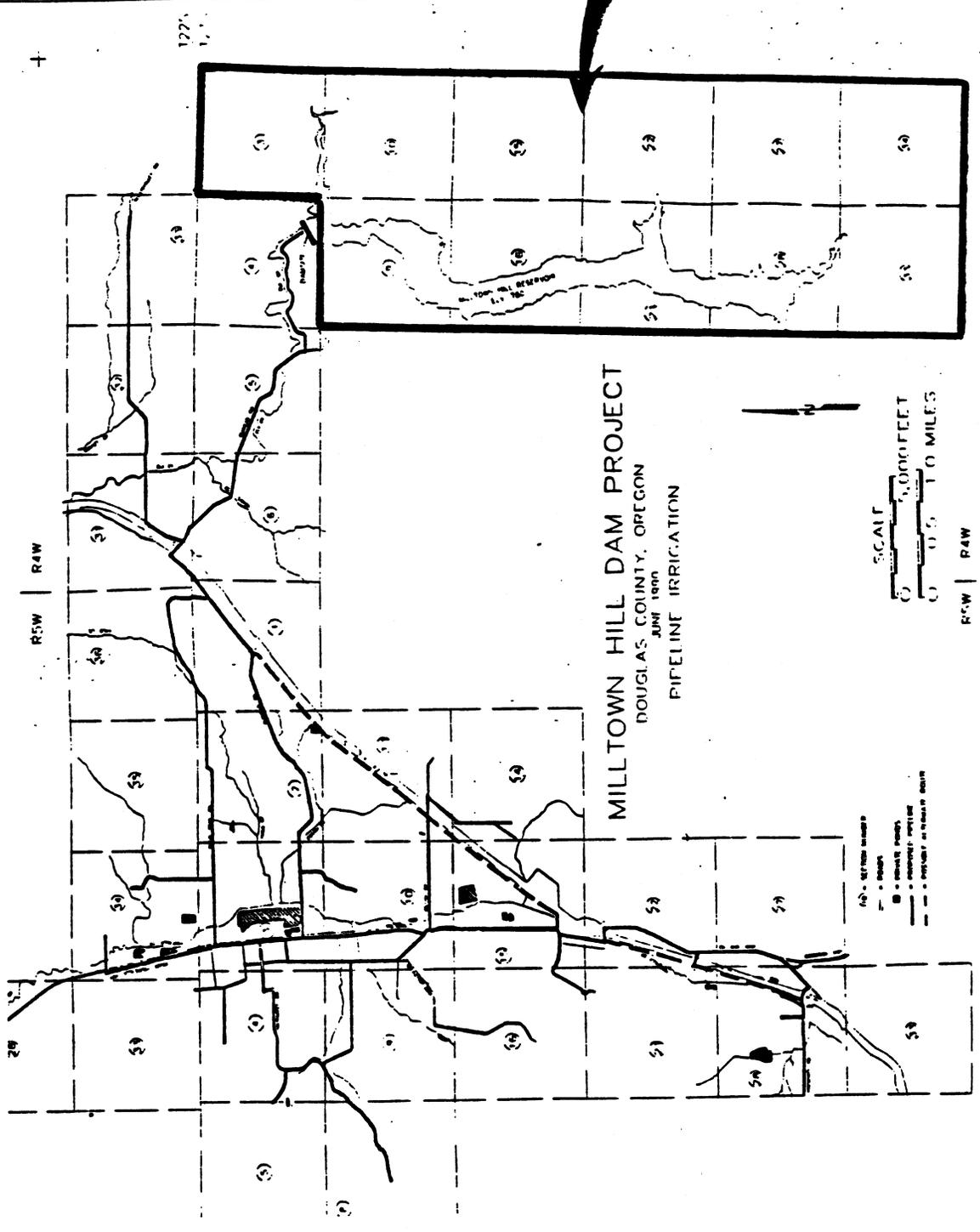
We request that your organization review its records to determine if threatened and endangered species have been identified within the project boundary or near it. If so, would you please provide a listing of the species and the locations.

If you need additional information or have questions call me or Tom Boucher at Campbell-Craven 639-7200.

Sincerely,



Richard E. Craven



PROJECT AREA

MILLTOWN HILL DAM PROJECT
 DOUGLAS COUNTY, OREGON
 JUNE 1966
 PIPELINE IRRIGATION

- (29) - SECTION NUMBER
- - DAM
- - RESERVOIR
- - PIPELINE
- - - PROPERTY BOUNDARY

SCALE
 1" = 1,000 FEET
 0 0.25 0.5 1 MILES

MILLTOWN HILL
 PROJECT

Oregon Natural Heritage Data Base

1205 NW 25th Avenue
Portland Oregon 97210
503 229 5078

January 4, 1991

Campbell Craven
Attn: Tom Boucher
9170 SW Elrose
Tigard, OR 97224

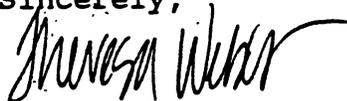
Dear Mr. Boucher,

There were no elements in our system of rare, threatened or endangered species for the area designated in your request; Township 23s, Range 4w, sections 3, 9, 10, 15, 21, 22, 27, 28, 33 and 34.

However, please remember that an absence of information in a given area does not mean there are no rare, threatened or endangered species there.

Also enclosed is the invoice for the search.

Sincerely,



Theresa Weber
Data handler

CAMPBELL-CRAVEN
ENVIRONMENTAL CONSULTANTS

Environmental Reports
Regulatory Coordination
Biological Studies
Technical Analyses

9170 SW Firose
Tigard, Oregon 97224
Phone (503) 639-7200
FAX (503) 620-1657

March 27, 1991

Mr. Russell Peterson
U.S. Fish and Wildlife Service
2600 S.E. 98th Avenue
Suite 100
Portland, OR 97266

Subject: Proposed Milltown Hill Project
Elk Creek, Umpqua River, Oregon
Section 7 Consultation

Dear Mr. Peterson:

We have not received the list of threatened or endangered species from USFWS however, I have confirmed that the spotted owl will be included. A proposed scope of work has been prepared to address Section 7 Consultation for the proposed project.

Please review the scope and provide your written response as to the adequacy of the scope to address Section 7 Consultation.

Sincerely,



Richard E. Craven

cc Lowell Hayes, BLM
Jim Fessler, ODFW

RECEIVED
MAR 29 1991
PORTLAND FIELD STATION

SCOPE OF WORK FOR CONDUCTING SPOTTED OWL SURVEYS IN THE
VICINITY OF PROPOSED MILLTOWN HILL DAMSITE
(SW1/4 SE1/4, SECTION 4, T.23S., R.4W., W.M.)

1.0 Area of Survey

Suitable Spotted Owl habitat within 1.2 miles from the perimeter of the proposed dam site will be surveyed.

2.0 Number and Timing of Surveys

As project activity may begin in early 1992, a one year census involving six visits is proposed. The first survey will be conducted during the end of April 1991, with subsequent visits made at 2-3 week intervals. Four of the visits will be conducted before the 30th of June.

3.0 Survey Method

Census points will be established (See attached map), which provides complete audio coverage of the survey area. After sunset, a minimum of ten minutes will be spent at each census point imitating and listening for Spotted Owl calls. If owls respond during the nighttime survey, a daytime follow-up survey will be conducted to determine bird status and activity center.

Some proposed census points may not be callable due to private ownership and potential disturbance of domestic dogs in nearby residences. In these situations alternative stations or daytime surveys may be required.

4.0 Reporting

For each survey a summary will be prepared describing: survey route and stations called, time and weather information and descriptions of any owl responses.

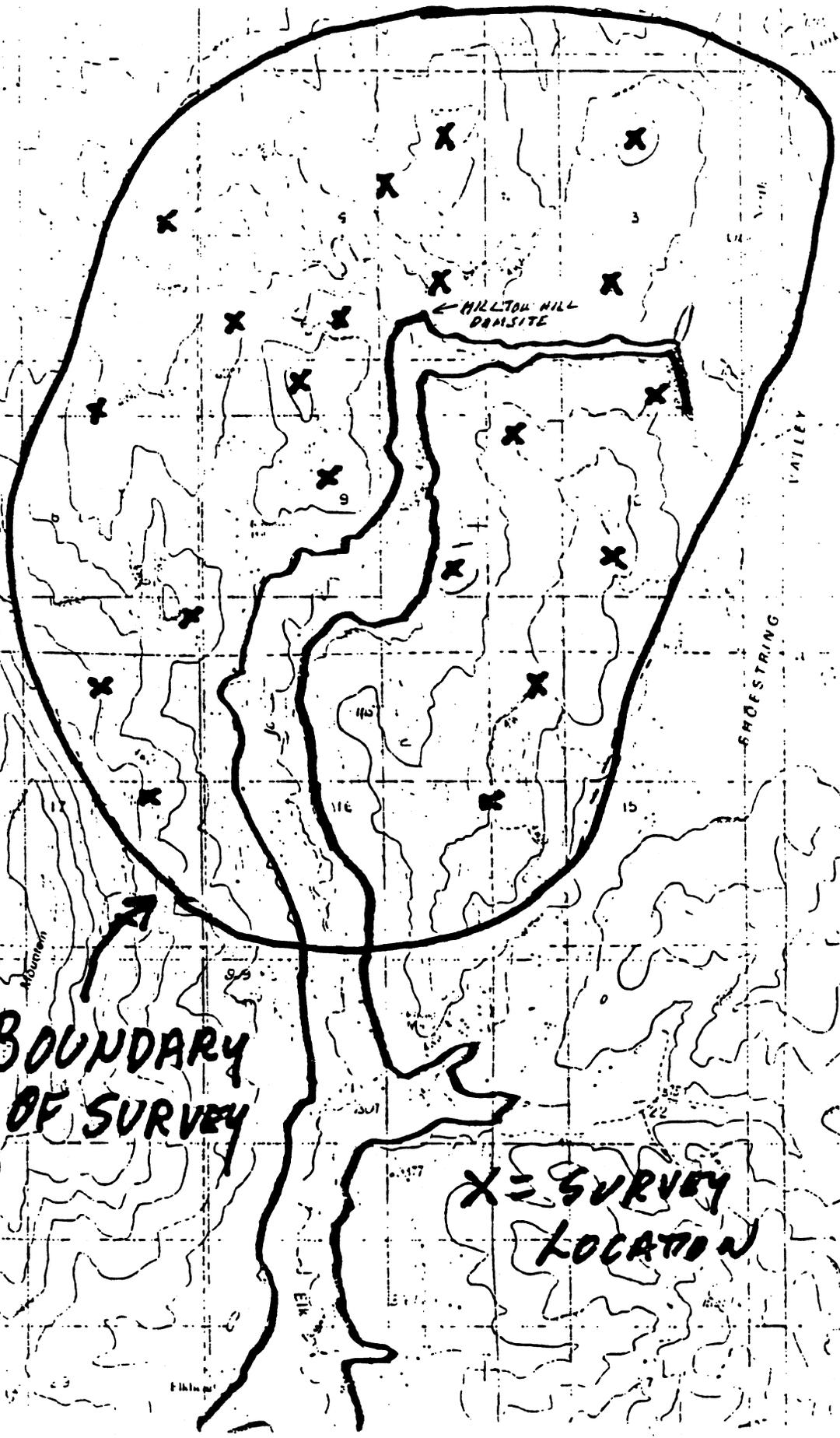
5.0 Personnel:

Barry Schreiber

B.S. 1976 Wildlife Science, OSU

M.S. 1987 Forest Ecology

Completed 3 spotted owl surveys in 1990 for ODFW and 2 private consultants. Crew leader for spotted owl monitoring program on Surslaw National Forest, 1987.



**BOUNDARY
OF SURVEY**

**X = SURVEY
LOCATION**

**HILLTON HILL
DAM SITE**

SHOESTRING
VALLEY

MOUNTAIN



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Portland Field Station
2600 S.E. 98th Avenue, Suite 100
Portland, Oregon 97266

April 26, 1991

1-7-88-I-20-GM

Richard E. Craven
Campbell-Craven Environmental Consultants
9170 S.W. Elrose
Tigard, Oregon 97224

Dear Mr. Craven:

This is in response to your letter of March 27, 1991, and received in this office on March 29, 1991, regarding spotted owl survey efforts on the Milltown Hill Project.

The scope of the survey effort appears to follow the guidelines recently released by the Service. A copy of the survey guidelines is enclosed and we recommend you follow the guidelines to assess whether spotted owls will be affected by the Milltown Hill project.

We appreciate your concern for conducting adequate spotted owl surveys for the Milltown Hill Project. If you have any questions regarding the survey guidelines, please contact Gary Miller of this office at (503) 231-6179.

Sincerely,


Russell D. Peterson
Field Supervisor

Enclosure

GSM:mm:88I20



United States Department of the Interior

GF (SRPA)

BUREAU OF RECLAMATION OFFICIAL FILE COPY		
DEC 13 1991		
TO	INIT	DATE
150	DM	12/17
151	DOC	12/17
151P		
151A		
FILE		

FISH AND WILDLIFE SERVICE

Portland Field Station
2600 S.E. 98th Avenue, Suite 100
Portland, Oregon 97266

91-10871
6973

December

1-7-92-I-25

Memorandum

To: Regional Environmental Officer, Bureau of Reclamation, Boise, ID

From: Field Supervisor, U.S. Fish and Wildlife Service, Portland Field Office, Portland, Oregon

Subject: Biological Assessment of Potential Effects of the Milltown Hill Project on Federally Listed and Candidate Plant and Animal Species

V X ENV-700
GF
(Biological Assessment)

This responds to your November 1, 1991, letter, that was received by this office on November 4, 1991, requesting comments on the Biological Assessment of Potential Effects of the Milltown Hill Project on Listed and Candidate Plant and Animal Species (Assessment), Douglas County, Oregon.

General Comments

The Assessment does not address the potential impacts of the construction of a gravity pressure pipeline system or the changes in agricultural lands receiving irrigation water from the reservoir.

The distribution of the northern spotted owl (Strix occidentalis caurina) extends from British Columbia, south to the Pit River in northern California (Thomas et al. 1990), and not to central Mexico as stated on p. 6 of the Assessment.

Specific Comments

Based upon the information contained in the Assessment, we concur with your determination that the proposed project would not likely adversely affect the federally listed Columbian white-tailed deer (Odocoileus virginianus leucurus), bald eagle (Haliaeetus leucocephalus), peregrine falcon (Falco peregrinus), or northern spotted owl. The protection of 767 acres of suitable habitat for the Columbian white-tailed deer should provide beneficial effects and aid in its' recovery.

Species specific impacts to the federal candidate species Umpqua chub (Oregonichthys kalawatseti), northwestern pond turtle (Clemmys marmorata), or rough allocarya (Plagiobothrys hirtus) cannot be properly addressed at this time due to inadequate population information. Surveys are needed to determine existing distributions for all three species, especially the rough allocarya, which is currently under administrative review for listing.

We strongly discourage the introduction of warm-water fish species into the proposed reservoir, as this action may lead to predation on the Umpqua chub.

If the northwestern pond turtle is present in the area, the proposed wetland mitigation area may provide suitable habitat. If the pond turtle becomes a federally listed species, management recommendations would be made to sustain local populations.

The requirements established under Section 7(a)(2) and 7(c) of the Endangered Species Act of 1973, as amended (16 USC 1531 et. seq.), have been met, thereby concluding the consultation process.

Should new information indicate listed or proposed threatened or endangered species to be present in your project area, you should be aware of your continuing responsibilities as described under Sections 7(a) and (c) of the Act.

We appreciate the opportunity to informally consult with you on the proposed project. If you have any additional questions regarding endangered species, or if we can be of any further assistance, please contact Richard Szlemp of our office at (503) 231-6179 or FTS 429-6179.

Sincerely,


for Russel D. Peterson
Field Supervisor

cc: PFO-ES

RRS:rs:92I25

LITERATURE CITED

Thomas, J.W., E.D. Forsman, J.B. Lint, E.C. Meslow, B.R. Noon, and J. Verner. 1990. A conservation strategy for the northern spotted owl. A Report by the Interagency Scientific Committee to address the conservation of the northern spotted owl. U.S. Department of Agriculture, Forest Service, and U.S. Department of Interior, Fish and Wildlife Service, Bureau of Land Management, and National Park Service. Portland, Oregon. 427pp.

- APPENDIX G -

DRAFT ENVIRONMENTAL IMPACT STATEMENT
COMMENTS AND RESPONSES

PUBLIC HEARINGS

Introduction

The draft environmental impact statement (DEIS) was filed with EPA December 11, 1991 as statement number DES 91-33. The comment period continued until February 11, 1992. The DEIS was sent to local, state, federal agencies, Native American Tribes, and individuals of the public to solicit comments (See: Appendix E, Distribution List for the DEIS). Public Hearings were held January 20 and 21, 1992, in Drain and Roseburg, Oregon, respectively, to receive comments. The following summarizes the public hearings and responses to comments received at the public hearings. The hearing record is available from the Bureau of Reclamation. The comments and responses are presented below.

Public Hearings

January 20, 1992 Public Hearing, Drain, Oregon. A total of 30 people attended this meeting. After the Bureau of Reclamation explained that the purpose of the meeting was to accept oral or written comments on the adequacy of the DEIS, 6 persons submitted oral comments on the projects. Comments were generally supportive of the project. Speakers addressed the local benefits that would result from the project: improved municipal and domestic water supply and water quality, flood control, improved irrigation water management, municipal and industrial growth, enhancement of fisheries habitat, and new flat water recreation opportunities.

No comments addressed the adequacy of the DEIS. Significant comments requiring responses:

January 21, 1992, Public Hearing, Roseburg, Oregon. A total of 22 people attended this meeting. After the Bureau of Reclamation explained to the attendees that the purpose of the meeting was to accept comments on the adequacy of the DEIS, 5 persons submitted oral comments on the project. Most speakers indicated there is a need for the project to improve fisheries habitat, to improve water quality, to satisfy existing water rights, to control flooding, and to provide for controlled seasonal distribution of surface water. One speaker made comments concerning content of the DEIS.

Public Hearing comments requiring responses are as follows:

January 20, 1992 Public Hearing

- Mr. Whitford (Page 18 of Hearing Transcript)

"But I would very, very much like to see it go. Being against it a little... its going to cause a lot of traffic right in front of my home which I'd rather not have..."

Average daily traffic (ADT) counts in the vicinity of Mr. Whitford's residence show 219 vehicles per day, May 1990. During operation of the project during the recreation season ADT would rise to 290 on weekdays, and 434 on weekends.

January 21, 1992 Public Hearing

- Mr. Kramert (Page 6 of Hearing Transcript)

"While this project doesn't strike me as being oppressive, it has an element where conceivably there are a great many people in the County that are being victimized. If we are here tonight to salute a project that's been run up the flagpole and is a done deal, then you can cut me off right now."

While Douglas County has proceeded on its own accord to acquire lands and initiate road construction in the project area, Reclamation has made no decision on whether or not to fund the project. Before a decision can be made, the National Environmental Policy Act requires Reclamation to complete a final EIS, which must consider all the significant concerns which surfaced when the draft EIS was reviewed. A record of decision document will be prepared after the final EIS has been filed and made available to interested publics."

- Mr. Kramert (Page 7 of Hearing Transcript)

"... Then the project went ahead again this time with the provision that there would be, in conjunction with this dam

A detailed description of the project facilities and the pipeline distribution system is covered in pages 2-4 through 2-

and reservoir, pipelines to distributed the water."

"Now, this is something that hasn't been mentioned here or in the Environmental Impact Statement, but this seems to me in cost to be very formidable, and I haven't heard any numbers in connection with the pipeline to distribute this water.

• Mr. Kramert (Page 8 and 9 of Hearing Transcript)

"Because no pipelines live forever, who is going to conduct the maintenance?"

"I'm suggesting that we should look at not the environmental impact but the societal impact. You may have been brainwashed, and all the commissioners may have been brainwashed in ten years because we have built two prior dams. We have been assured that this is a really desirable thing. We have promised the people up in Yoncalla and Drain that this is coming..."

"... It seems to me that the euphoria attendant to some such project should be based on some rational conception of what are the benefits."

13 on the draft EIS. Project costs were listed on pages 2-20 through 2-22. Updated costs are included in this Final EIS.

Maintenance of the pipeline system will be the responsibility of Douglas County."

Social impacts (both favorable and adverse) of the proposed project were addressed on pages 3-91 through 3-95 of the DEIS. The two recently built dams in the County (Galesville and Berry Creek) have provided significant economic and social benefits in the Roseburg area. The proposed Milltown Hill project is intended to improve social and economic conditions in the Elk Creek subbasin, by providing storage and distribution of surface waters, which, at the present are uncontrolled. The project would provide the presently unfulfilled water needs for irrigation, municipalities and industries, fisheries habitat, rural domestic conditions, and flood control.

Planning for the proposed project was a coordinated effort by the public and interested federal, state and local groups. Issues, concerns, and benefits were identified. Coordinated agency

efforts were used to address and resolve issues and concerns and to provide maximum benefits. State-of-the-art methods were used to quantify public and private water needs, water availability, and the optimum conditions for water distribution to benefit social, economic, and biological needs.

"... There are ... 86,000 the last I knew in the County. How about a survey of the rest of them to see if they are equally enthused?"

As stated in the previous response, the residents of Douglas County have participated in the planning phase of the project. The public has also been involved in the development of the Douglas County Comprehensive Plan, which addressed water development projects throughout the County. Public comment on the DEIS considered the need for and benefits of project construction and operation.

● Mr. Yockim - (Pages 14, 15 of the Hearing Transcript)

"I'd like to make three points. I'd like to see examined in the EIS. One of them is the ability to use the stored water as a way to even out the seasonal distribution of the water... during those dry periods.

Douglas County officials have analyzed the seasonal water needs for municipalities, industries, rural domestic areas, irrigation for crop production, and fish and wildlife habitat enhancement. The various water needs and resulting seasonal distribution allocations were developed after analyzing existing surface water rights, minimum instream flows mandated by the state of Oregon, and estimates provided by the Oregon Department of Fish and Wildlife for anadromous fisheries needs during low flow periods. Seasonal distribution of the impounded water will be

determined after consultation with ODFW, the Corps of Engineers, and other interested agencies. Seasonal water distribution allocations will depend primarily on water storage conditions prior to each irrigation season.

"Water allocation rules that are being developed by the Water Resources Department of the State, we notice they've listed the Umpqua River system as an area of concern, and they want to give some special attention to it."

If the proposed project is approved for funding, Douglas County will be required to submit an application to the Water Resources Department (WRD) for water rights, pursuant to Oregon Revised Statutes 537. The application will be subject to a public hearing to be conducted by WRD. It is expected that the hearing will address the water rights and allocations in the Elk Creek subbasin.

"... Roseburg City Sewage Facility was able to use the Galesville water as a way to dilute out their effluent and therefore have a lower of treatment required... The same thing will happen with the communities in Drain and Yoncalla. They can use the water for helping in their effluent treatment programs.

Sanitary waste discharges are made into Elk Creek from the Drain Sanitary Treatment Plant. Sanitary waste discharges are made into Yoncalla Creek from the Yoncalla Sanitary Treatment Plant (DEIS, Page 3-29). No specific amount of water has been allocated from the project to treat or dilute effluents processed in the treatment plants in these cities. Additional summer and fall stream flows would help in the treatment or dilution of the effluents mentioned above.

LETTERS

This section includes letters received as a result of the review of the December 1991 DEIS. Reclamation's responses to specific comments are included where appropriate.

List of Letters Received

Individuals Page No.

No Date	George Winterbotham, Roseburg, Oregon	1
01/21/92	Dale Besset, Yoncalla, Oregon	2
02/08/92	Randy Crockett, Winchester, Oregon	3

Local Government

1/30/91	Albert D. Applegate, Jr., Mayor, City of Yoncalla	5
02/11/92	C.C.D. Development Corporation	6

State of Oregon

02/07/92	Martha O. Pagel, Senior Policy Advisor for Natural Resources, Office of the Governor	7
02/06/92	Water Resources Department	9
01/29/92	Department of Agriculture	15
01/13/92	Division of State Lands	16
02/03/92	Department of Transportation, Highway Division, Region 6	17
01/28/92	Department of Forestry	18
02/03/92	Department of Fish and Wildlife	20

Other States

No Letters

U.S. Department of Interior

No Date	National Park Service	30
02/12/92	U.S. Fish and Wildlife Service	32

Other Federal Agencies

02/06/92	Department of the Army, Portland District, Corps of Engineers, Planning and Engineering Division	36
02/24/92	Department of Commerce, National Marine Fisheries Service	38
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2572 Fisher Road
Roseburg, Oregon 97470

Bureau of Reclamation
Regional Office (Attention: 150)
Box 043-550 West Fort Street
Boise, Idaho 83724

To Whom It May Concern:

My name is George Winterbotham, and I have lived in Douglas County since 1939 with forty years in the Elkton area.

In the 1940's Elk Creek was a productive fishing stream with an adequate summer flow and a large sea-run cutthroat trout population. Currently, the sea-run cutthroat trout population in the Umpqua River system is the most distressed population and considered by many to be a candidate for a sensitive designation. Elk Creek has ceased to be any kind of contributor to the sea-run cutthroat population as far as can be determined. If fish are stressed in the small tributaries and move into Elk Creek, they are greeted by little or no water or water too warm to support their existence.

In the early 1940's electricity came to the area. In the 1950's irrigation systems, wells for houses, mills with mill ponds, and a growing number of new houses and businesses increased the demand for instream and inground water.

This removal of water from the Elk Creek watershed and stream resulted in the drying up of Elk Creek at various points and high temperatures for the rest of the creek in a number of years.

In the winter time water flows are quite high and periodically flood downstream towns and communities. The Milltown Hill Dam is the answer to the problem. Without it, one does not have a viable stream. The project will permit the re-establishment of the fish runs, provide water for the communities, give a measure of flood control, and enhance the livability of North Douglas County.

Thank you.

George Winterbotham

Thank you for your review and comment.

P. O. Box 369
Yoncalla, Oregon 97499
January 21, 1992

Bureau of Reclamation - Regional Office
Box 104 - 550 West Fort Street
Boise, Idaho 83724

Gentlemen:

I am presently serving on the Water Resource
Advisory Council for this area and Douglas County, Oregon.

I attended the Drain, Oregon meeting on
January 20, 1992; and wish to confirm the unanimous sup-
port that was expressed in that meeting. As a Board member
for this area, I have yet to hear any negative comments
from the citizens of northern Douglas County.

As a property owner in the Yoncalla area, I
would like you to be aware of the fact that Yoncalla Creek
floods one of my fields several times each year. So,
consequently, the water ruins the fence every year.
Several of my neighbors have the same problems with the
creek as I do.

Milltown Hill project will not only be a great
benefit for this community, it will also alleviate the
high water in Elk Creek, thus allowing Yoncalla Creek to
run-off.

Sincerely,



Dale Bessett

Thank you for your review and comment.

Regional Environmental Officer
U.S. Bureau of Reclamation
Box 043 550 West Fort Street
Boise, Idaho 83724

February 8, 1992

Attention: Bob Hamilton

1. I request that the US Bureau of Reclamation extend the time for official comments on the Draft Environmental Impact Statement (DEIS) for the Milltown Hill Project by at least 6 months. Official testimony is accepted only until February 11, yet the Loan Application Report (LAR) will not be ready for public review until after that date. The LAR should contain financial information that will help the public make informed comments. Without a review of the LAR, even the county officials will not know the full impact on "Socio-Economic Conditions" as described in the DEIS.

2. From the preliminary information that I have obtained, there are serious doubts that the county can afford this project at this time.

Preliminary information is that the county will have to borrow \$23,000,000 at payments of over \$1,000,000 per year over the next 40 years. The county will also have to invest an additional \$11,000,000 up front out of current cash reserves. If you count the interest lost at 7% average, this portion of the financing is \$770,000 per year. Cost per year of the project is therefore going to be around \$1,770,000.

The only revenue to the county that is expected on this project is from water sales. The preliminary estimate is for water sales of \$775,000 per year - maximum. The project is not planned to sell power, but even if it did, the maximum annual power receipts would only be \$300,000. In total, the maximum annual revenue generated would be \$575,000.

If the county proceeds with this project, therefore, we can expect the net county annual cash flow to be reduced by at least \$425,000 (\$1,000,000 less \$575,000) and more realistically by \$1,495,000 (\$1,770,000 less \$275,000). The cash loss on the Milltown Hill project could have a devastating impact on current Douglas County operations.

1. Reclamation did not receive a broad indication of a need for longer review; therefore, an extension was not provided. The loan application report will not include any actions not presented in the EIS.
2. The DEIS provided cost estimates for the project. The FEIS has updated these costs to coincide with those which will be presented in the LAR.
3. This project could be funded under the Reclamation's Small Reclamation Projects Act. Funds are granted based on the ability of the County to repay the loan. This project would likely compete with other projects that the County is considering and will be funded based on priorities and the potential benefit to all residents of the County and considered by the Board of County Commissioners. The County would make the final determination to accept the loan based on these priorities.

This cash loss would be coming at a time when county receipts are no longer expected to match county operating costs. The county is currently asking for budget cuts, and building the dam would certainly mean that more cuts would have to be made. The county is no longer in a position to say that this dam can be paid for by receipts from the Galesville dam and it will all be made right by O & C revenues. Even if we applied the county theory of finance that Galesville revenue should be used to pay for Milltown we would fall short. Average cash per year generated by Galesville has only been \$375,000.

If the DEIS comments are to be complete, they should include an explanation of where the money will come from to pay off the \$23,000,000 loan. Where will the money come from to replace the interest on \$11,000,000 of county reserves? What current programs will be cut to pay the newly acquired debt? What will the "Socio-Economic" impact be of these cuts?

It is the government's place to make investments that the private sector will not; such as in schools, libraries, health care, police, bridges, roads and sometimes even dams. The government isn't expected to come up with a bottom-line, just live within its means, and give full disclosure to the public of where the money comes from and how it is to be spent.

Will we have full disclosure on this project before the final testimony is received?

Respectfully,

Randy Crockett

Randy Crockett
P.O. Box 1067
Winchester, Oregon 97495



CITY OF YONCALLA

P.O. Box 508 Yoncalla, OR 97499-0508

January 30, 1992

Bureau of Reclamation
Regional Office
Attn:150
Box 243-550 West Fort Street
Boise, Idaho 83724

Gentlemen:

This letter is in support of the Milltown Hill Dam project in North Douglas County Oregon. I speak not only for the City of Yoncalla but for all the area encompassing the project-Yoncalla, Scotts Valley, Elkhead, Rice Hill and the Drain area.

The dam will give us a stable reliable water supply which is needed if we hope to grow; improve fire protection; provide irrigation water for the ranches; provide recreational activities not only for our local people but for others, thus adding to our economy; and provide stream flow stabilization which is badly needed. Additionally, it will provide fish and wildlife enhancement.

The Community is 100 percent in favor of the project and feel it is long overdue. We urge continuance of the project.

Very respectfully,

(Signature)
Albert D. Applegate Jr.
Mayor

Thank you for your review and comment.



**C.C.D. BUSINESS
DEVELOPMENT CORPORATION**
744 Southwest Ross Street • Beaverton, OR 97007
Telephone 503 / 672-4728 • FAX 503 / 672-7011
Toll Free in Oregon 1-800-423-6070

February 11, 1992

Bureau of Reclamation
Regional Office
Debra Schwarz
ATTN: 150
Boise ID 83724

Dear Ms. Schwarz:

CCD Business Development Corporation is the federal Economic Development Administration-designated district organization for the Coot-Curry-Douglas Economic Development District.

We write in support of the Milltown Hill Dam Project proposed for Elk Creek in northern Douglas County, Oregon.

It is our opinion that the environmental benefits the dam would provide the region are more significant than the environmental disadvantages addressed in the project's EIS. For farmers, businesses and homeowners benefiting from the more consistent water supply, a reservoir for recreation, and the reduced threat of flooding, and for the anadromous fish populations in Elk Creek benefiting from stored water released during low flow periods and added gravel to improve spawning conditions, the benefits are obvious.

Equally as obvious are the economic benefits of the project in our region, which is currently suffering from an acute dependence on the troubled timber industry and double-digit unemployment. The jobs the dam construction will provide and the increased tourism traffic the completed project will generate will help diversify our economy away from our dependence on timber and also assist in controlling Douglas County's unemployment rate, currently 10.3%.

Of possibly even greater long-term importance, this project will add a critical water supply for fire protection for industry, the lack of which currently prevents full utilization of potential industrial sites in the Drain and Yoncalla areas.

It is for these reasons that we fully support the Milltown Hill Dam Project.

Sincerely,

Peter Graff
Executive Director

Thank you for your review and comment.

BARBARA ROBERTS
GOVERNOR



OFFICE OF THE GOVERNOR
STATE CAPITOL
SALEM, OREGON 97310-0370
TELEPHONE 503-378-1111

February 7, 1992

Mr. Monte L. McClendon
Regional Environmental Officer
U.S. Bureau of Reclamation
Box 045 550 W. Fort St.
Boise, ID 83724

Dear Mr. McClendon:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for the Milltown Hill Project in Douglas County. We are pleased to lend our support to this promising effort.

The Bureau of Reclamation is to be commended for the substantial planning, coordination, and data gathering effort reflected in the draft document. We believe you have addressed most of the important aspects and potential impacts of the proposed reservoir project.

With the objective of maximizing the usefulness and completeness of the final EIS, however, we urge the Bureau to address the issues raised by the four commenting agencies: Department of Agriculture, Forestry Department, Water Resources Department, and Department of Fish and Wildlife. More information or a clearer presentation is requested on a number of issues, including: wildlife impacts and mitigation, protection of existing instream water right flows, management and protection of stored water allocated to fish enhancement, water supply needs, cost/benefit ratio, and impact on and mitigation of forest and farm resources. In particular, we recommend that the FEIS specify that several more specific management plans be developed for water management and for fish and wildlife mitigation and protection. The attached comments from the agencies explain these concerns in more detail.

We appreciate the opportunity to review this draft and hope that our comments will be helpful in preparing the

2

4. The draft EIS suggests that the traditional surface archeological survey was not effective in locating cultural resources in the project area because of visibility problems. It states (page 3-70) "heavy vegetation obscured the ground surface during the survey and may have prevented detection of some archeological sites" and "prehistoric archeological material was discovered in three locations where the vegetation had been removed (recorded as sites 35D0449, D0450, and D0451).... We are concerned that these three prehistoric sites were found only where the land in the area of the proposed reservoir was exposed and that they represent the total number found by the surveys to date. Under the circumstances, it is doubtful that the Section 106 investigations could be considered complete until followup subsurface probing or testing and/or resurvey is done in all project areas where cultural resources may be present but obscured by vegetation, duff, soil, or shallow surface deposits. The final EIS should describe the results of the followup investigations or include a plan to carry them out, either prior to construction or after the reservoir is filled and drawn down.

4. See response #2 above.

5. The final EIS should summarize the key elements of a mitigation program developed in consultation with the SHPO and reflected in a signed Section 106 Memorandum of Agreement. The program should include a research design; a plan for further survey and testing needed in the project area; a plan for data recovery on sites that address needs defined by the research design; a plan for recording historic buildings or other structures prior to their demolition; a plan for long-term management of all cultural resources, including those determined to be significant to Native Americans or other ethnic groups; a plan for monitoring and treating cultural resources discovered during construction or reservoir operation; a plan for treating human remains and grave goods that may be exposed on federal or other land during the investigations or the reservoir operations; and a plan for curation. The final EIS should also specify how the agency's Section 106 and other statutory obligations will be fulfilled on Bureau of Land Management lands that would be affected by the project.

5. See response #2 above.

Thank you for your review and comments.

Richard L. Winters
Richard L. Winters

February 6, 1992

Memorandum

To: Ron Hofman, Governor's Forest Planning Team
From: Rick Bastasch, Resource Management Division
Subj: WRD comments on the Milltown Hill Project DEIS, Douglas County, Bureau of Reclamation

The Water Resources Department appreciates the opportunity to comment on the draft Environmental Impact Statement (DEIS) for the proposed Milltown Hill Project in Douglas County. We support efforts by Douglas County to provide for current and future beneficial uses of water in the Elk Creek drainage. Findings in the Department's Umpqua River Basin Program recognize that the streamflow available in the Elk Creek drainage does not currently satisfy existing water rights during the low-flow months. It notes that storage of winter flows will be necessary on most streams to provide future consumptive uses and an adequate minimum flow for the preservation of the anadromous fishery. In addition, the Department's state policy on Instream Flow Protection directs the Department to support environmentally sound multi-purpose storage projects. The Milltown Hill Project appears promising in this regard, and we welcome the opportunity to offer our input into the evaluation of its potential environmental impacts.

The Bureau of Reclamation is to be commended for its description of the proposed project and the anticipated environmental consequences in the DEIS. It is evident that a great deal of data gathering, analysis, and coordination has taken place. The final EIS will provide the basis from which decisionmakers and the general public will derive their understanding and evaluation of the project's probable merits and effects. With the goal of enhancing the final document, we have identified a few issues which could be addressed or explained more fully. These suggestions are presented in detail in the attachment.

We hope that our comments are helpful to the Bureau in preparing the final EIS. Please contact me if you have any questions about the Department's comments or concerns.

cc: Gary Ball, Watermaster, District 15
Randy Moore, S.W. Region Manager
Steve Applegate, Water Rights Section

Thank you for your review and comment.



**Water Resources Department Comments
on the Draft EIS for the Milltown Hill Project
(February 6, 1992)**

The Water Resources Department (Department) appreciates the opportunity to comment on the draft Environmental Impact Statement (DEIS) for the Milltown Hill Project in Douglas County. The Bureau of Reclamation (Bureau) is to be commended for its presentation of the purpose, function, and potential impacts of the proposed project in this document. We believe that the discussion of a few issues, as detailed below, could be enhanced in the final EIS.

Need for the proposed project

The DEIS offers projections of anticipated future needs for water among various sectors and discusses to what extent these needs would be met by the proposed project. This information is very important because it provides the basis by which decisionmakers and the public can judge whether the potential environmental impacts are warranted. The need for the water and the likelihood that it will be developed as proposed will be of interest to the Water Resources Commission when it considers Douglas County's application to store water. Although the DEIS does project future needs, we recommend that the final EIS clarify the issues highlighted below.

1. **Municipal and rural domestic demands:** The projections of future municipal demand presented in the DEIS seem to vary in the document. For example, page 1-7 it states that 1,405 acre-feet (af) will be needed annually to meet the needs of the cities of Drain, Yoncalla, and Rice Hill through the year 2030. On page 3-85, this same amount is needed for Drain and Yoncalla alone, yet the table on that page, Table 3-21-4, suggests that the additional need for Drain and Yoncalla amounts to 2,003 af.

2. The text on page 3-84 explains that the projections assume a constant per capita rate of use, based on the average per capita rate for the period 1980-1986. For the city of Drain, this rate is 361 gallons per day (gpd). Based on the population data presented in Table 3-21-3 and the diversion demand in Table 3-21-4, however, the rate would increase to 507 gpd in 2030. Likewise, the average per capita rate for Yoncalla is presented as 214 gpd in the text. The population and diversion projections, however, show the rate rising to 266 gpd in 2030. Perhaps this information should be double-checked for accuracy.

3. The expected additional need for rural domestic water by 2030 is 342 af per year. This demand was calculated after considering that the cost of purchasing stored water would slightly reduce water use (p. 3-86). The FEIS should perhaps also point out that the costs of building the infrastructure to deliver and treat the water may be another disincentive to taking advantage of a more reliable supply.

1. The 1405 acre-feet annual need for Yoncalla, Rice Hill and Drain, listed on page 1-7 is correct. The narrative on page 3-85 has been changed to list Rice Hill as well as Yoncalla and Drain, for municipal-industrial need. Table 3-21-4 has been deleted due to inaccuracies in the data.

2. The per capita rate for Drain would remain constant at 361 gpd. The per capita rate for Yoncalla would remain constant at 214 gpd. The increase in demand from 1980 to 2030 reflects the projected increase in municipal (population) demand plus increased industrial demand.

3. A slight reduction (estimated 10%) in the projected rural domestic demand may occur due to rural users choosing to rely on existing wells rather than take advantage of piped water, however this area has a history of marginal rural water supplies, so piped water should be more reliable.

4. **Industrial demands:** The document anticipates that future industrial water use will be limited to sand and gravel operations, which are expected to require an additional 150 af per year (pp. 1-7, 3-87). The discussion of the need for additional industrial water supplies (pp. 1-8, 3-79, 3-82, 3-92), however, implies that a wider variety of industries might be attracted to the area if there were a better water supply. For example, the construction of Galesville Dam is given credit for attracting three new manufacturing facilities (p. 3-79). The presentation of potential industrial demand should clarify which industries are likely to develop and what their needs may be.

5. **Irrigation demand:** The DEIS explains that 897 acres of irrigated land need a supplemental supply because of the later dates of their appurtenant water rights. Is this estimate based on the water right records alone, or was there some field verification of the actual acreage? The project would provide a supplemental irrigation supply for these 897 acres plus a primary supply for 3,764 acres. The Bureau estimates that there are 7,737 arable acres in the subbasin. However, the DEIS does not present information on the probability, given landowner interest and economic considerations such as the need for drainage and other on-farm improvements, that the 9,654 acre-feet dedicated to irrigation would actually be developed. We recommend that the FEIS include such information.

6. **Additional information needs:** The DEIS should address not only projected needs based on population estimates and arable land, but the likelihood that these demands will actually materialize. It appears that a benefit/cost analysis has been conducted, and that some results from that analysis are included in the DEIS. We recommend that a presentation of the results of the benefit/cost analysis be included or appended. This analysis should include a range of scenarios, including the possibility that the demand for the water may turn out to be lower than projected. Another helpful element to include in the FEIS would be a discussion of how or if the project fits into an overall water supply plan.

Alternatives

7. The DEIS briefly discusses several alternatives which were considered but excluded from detailed study. This discussion, like the presentation of projected needs, would be enhanced by the inclusion of the results of a benefit/cost analysis for the various alternatives.

8. The last two paragraphs of this section (p. 2-28) describe alternatives that do not include a dam. These two paragraphs could be expanded to better document why these alternatives were not considered in more detail. For example, under non-structural alternatives, municipal conservation is mentioned as an alternative supply, but not agricultural conservation. Are estimates available of the quantity of water which could be provided through agricultural conservation? This paragraph

4. It is not possible to predict precisely what industries would be attracted to the area when a reliable, increased water supply is made available. County zoning ordinances and water availability would probably dictate the type and size of industries which would be attracted to the area. The allocation for municipal-industrial use is 1,405 acre-feet, which would not attract large industries.

5. The 897 acres of irrigated lands needing supplemental supply of water was determined by a survey and public meetings. It is not likely that the entire 7,377 arable acres would be fully developed. Field size and shape, pumping costs, topography, costly subsurface drainage development, and land owner interest are factors which limit irrigation development.

The County anticipates municipal and industrial subscription of roughly 5% during the first year of the project and full development within the first 20 years.

6. See response to comments #2 and #3 of R. Crockett letter on page 3. Also, CEQ regulations do not advocate the presentation of a benefit to cost ratio in a NEPA document.

The Douglas County Water Management Plan prepared in 1979 and updated in 1989 identified water needs in the County subbasins. The plan also identified the need for storage sites, including the proposed Milltown Hill project.

7. There were several alternatives considered in the evaluations for this project. Project cost was only one criterion that was used to pursue feasible alternatives. See responses #2 and #3 to R. Crockett letter on page 3.

8. Municipal conservation is already practiced due to the limited water supply. Additional quantities that could be conserved through irrigation conservation have not been estimated but would be a minor contribution, since Elk Creek has little flow during most of irrigation season.

also notes that the purchase of irrigation rights would be contrary to the goal of diversifying the economic base of the area. It would be helpful to present an analysis to support this statement. How many irrigation rights would be available? How many would be necessary to supply the anticipated needs? Could the economic base be enhanced and diversified if some irrigation rights were transferred to higher value agriculture and others retired for municipal needs? This information is analogous to the information on alternative reservoir sites provided in the previous section. Providing such information on the non-reservoir alternatives would make the discussion of alternatives more complete.

Surface water quantity

4. We suggest that a clearer presentation of water availability and instream water right flows be included. The DEIS presents a table (Table 3-8-1) which displays monthly flow information from the gage near Drain. Figure 3-8-1 compares the average flow with the combined demand of the protected instream flow and pre-1974 water rights. An additional table showing year-round instream water right flows for all reaches of Elk Creek and flow data, such as monthly 50% and 80% exceedence flows, would illustrate when water is available for storage as well as the relative availability during that period. An example table is attached.

10. The DEIS should discuss in more detail how the stored water will be managed. We recommend that the FEIS explain that the Bureau and the county will coordinate with the appropriate state agencies, including this Department and the Department of Fish and Wildlife, to develop a management plan. In particular, the plan should articulate how the public benefits to be provided by the project will be secured. It would clarify the process for determining what natural flow levels must be allowed to pass through the reservoir to assure that existing instream water right flows are met, and for determining when stored water allocated for fish flows will be released during the summer and how it will be protected. Methods for resolving conflicts between competing users should also be included in the plan.

11. The analysis of the impact of the project on streamflows displays several scenarios, depending on precipitation conditions. It explains that the amount of stored water available for fishery needs will also vary depending on water conditions. The FEIS should explain how the storage allocations will be managed relative to one another. For example, will the allocations for irrigation, municipal and industrial, and fish be cut back proportionately during a dry year? We recommend this as an equitable approach. How these cutbacks are accomplished and distributed should also be a part of the management plan suggested above.

There has been an analysis of irrigation rights, but flows approach zero during summer months. Under the proposed project, Douglas County would supply significant amounts of water in a timely fashion, especially in the upper watershed of a very dry subbasin.

9. The example table with the requested flow information is included in the final EIS.

10. A management plan will be developed by Douglas County in consultation with ODFW for release of waters stored for fisheries use. Douglas County anticipates the preparation of a memorandum of understanding between ODFW and Douglas County for storage and release of these flows.

It will be Douglas County's responsibility to operate the project to assure that instream water rights are not violated. This is an environmental commitment (See: Appendix B).

11. All prior water rights will be met first. When natural flows to the reservoir fall below the prior rights, then inflow to the reservoir equals outflow from the reservoir. The criteria used for municipal (and industrial) water supply from reservoir releases is that it never takes a shortage. Although 7,377 acres of arable lands were identified by BR, sufficient water was not available to provide water to all arable land and municipal, and industrial, and fish enhancement. The County decreased the 7,377 acres to 4,661 acres using various criteria. The criteria used for irrigation water supply is that it is not more than 50% short in any given year, or not more than 100% short any ten consecutive year period. Municipal, industrial, and fish water will have similar priority of fill while irrigation will have the least. To meet "target flow", 5,180 acre-feet are needed to supplement releases. The 7,737 acre-feet includes the carryover for dry years to meet target flows. The County will prepare a water distribution plan for the WRD hearings regarding permits, for water rights. The plan will be reviewed by ODFW.

Water rights

12. Several of the activities associated with the proposed project would require water rights. Table 2-3, which lists the reviews, permits, and licenses required by federal, state, and local agencies, notes that water rights are required and that an application must be submitted. We suggest that this listing be expanded to read, "Water rights for storing of water, use of stored water, wetland mitigation, recreation facilities, fire protection, and rock washing. Instream water right or secondary permit for stored fish releases."

13. So far, only an application for the reservoir storage has been filed. As the water is developed, secondary permits will be required for the use of the stored water. During the construction stage, a water-use permit or a limited license may be required for the ponds to be used for rock washing at the contractor work area. The excavation of shallow areas for wetland creation in the upper end of the reservoir may also require a permit. Depending on whether a valid water right exists for the log storage pond to be acquired for wetland enhancement, a transfer or a new water right may be necessary for that use. Water rights are also required for the water supply for the recreation and fire protection facilities to be developed.

14. It is stated on pages S-5 and 3-59 that stored releases for fish enhancement would be protected by an instream water right which ODFW would receive from the Department. We suggest that this be re-worded as follows: "The Department of Fish and Wildlife may apply to the Water Resources Department for an instream water right to protect stored releases for fish enhancement." The Department must follow a process for approving instream water rights, and the FEIS should not imply that the instream water right has already been approved. In the final document, the Bureau may also wish to explore the alternative of protecting fish releases through a secondary permit from this Department to release the stored water for fish purposes.

Miscellaneous items

We have noted several miscellaneous items that would benefit from clarification or elaboration.

15. Page 1-10: The second paragraph should note that land use changes can also reduce flood damage.
16. Section 2.2.2.16 on project costs does not include the long-term cost of repairing, replacing, or removing an aging dam structure.
17. Page 3-32: The DEIS notes that the dead storage in the reservoir would be able to accommodate sedimentation for 100 years. What is the expected rate of

12. The table has been updated in the final EIS.

13. Douglas County will apply for all permits that are required by state law.

14. Reclamation understands that the ODFW must apply for an instream water right. These statements have been revised as suggested in the FEIS. ODFW's application would reflect the management plan on page 3 of their letter.

Douglas County will pursue a secondary permit and will coordinate operation of the project with ODFW.

15. The paragraph has been revised in the final EIS.

16. The operation and maintenance costs are included to keep the project in operable condition. Total structure replacements are not included.

17. Reclamation evaluated sedimentation for the proposed project based on USGS data for Elk Creek near Drain, Oregon gage. A total of 289 sample pairs of instantaneous stream discharge and suspended sediment concentrations were used in the study. Based on the

sedimentation? We suggest that the Bureau and county coordinate with land managers upstream from the reservoir to develop memoranda of understanding which would help to minimize sedimentation and other potential water quality impacts. The FEIS should refer to this coordination effort.

18. Page 3-35: The Elkhead mercury mine is discussed in this section on water quality impacts. It is unclear in this section and in the mineral and aggregate section (p. 3-13) whether the underground workings of the mine are currently saturated or will be saturated once the reservoir has filled. Will the flow of water from the mine adit increase if water levels rise due to the impoundment? Will this increase the potential for contamination? We suggest that these concerns be addressed in the final document.

19. Page 3-39: The discussion of impacts of the operation of the project on groundwater states that properly timed sprinkler irrigation methods minimize leaching and that it is consequently unlikely that significant groundwater contamination will result. The final EIS should go on to explain that agricultural chemicals can leach to the groundwater and eventually discharge to surface water if care is not exercised in restricting irrigation to that which can be consumed by the crops. The Bureau should indicate what measures it intends to employ to ensure that irrigators use the appropriate irrigation techniques to minimize leaching.

study, the annual sediment inflow was 9.9 acre-feet. Between 460 and 480 acre-feet or 920 and 960 acre-feet of sediment would accumulate in 50 and 100 years, respectively.

Douglas County will periodically review upstream land management practices to evaluate potential water quality impacts.

18. There are several mine adits. There is no continuous flow of water from any mine adit. The adits are at least 100 feet in elevation (>900 masl) above the reservoir's highest elevation (775 masl). There would be no anticipated increase in ground water that would cause flows from or to the mine adit.

19. Water is a very valuable resource in most of Douglas County, and especially so in a subbasin such as Elk Creek that lacks sufficient water in irrigation season. This lack of water, the price of water, and the metering devices that determine usage will be a great incentive to exercise proper irrigation practices. Metering devices will be installed and proportioned to provide an evaluation of the quantity of water applied compared to the duty of water. This measure will be employed by Douglas County and appropriate water user organizations.

January 29, 1992

DEPARTMENT OF
AGRICULTURE

Regional Environmental Officer
U.S. Bureau of Reclamation
Box 043 550 West Fort Street
Boise, Idaho 83724

Dear Sir:

The Oregon Department of Agriculture is pleased to submit the following comments for the draft environmental impact statement on the Milltown Hill Project.

General Comment

As a general comment, we believe the project will provide a wide range of benefits to the public with a minimum of adverse impacts.

Specific Comment

In our review of the draft report, we believe the following items need to be addressed:

- Fish Habitat** There is a lack of discussion on fish habitat in the streams above the project pool area. It is important to discuss the present habitat condition and the impacts. Indirectly, the draft talks about project fish enhancement measures resulting in a gain of 225 fall Chinook, 1450 winter Steelhead and 1450 Coho and at the same time a loss of 50 winter Steelhead and 50 Coho. Is this tradeoff acceptable. It is not fully addressed in the draft.
- Cost/Benefit Ratio** The draft lacks a detailed analysis of a costs benefits ratio for the project. Listed are details of project costs and annual benefits but we see no mention of a ratio analysis being completed.
- Farmland Impacts** Within the draft are statements that the loss of farmland is more than offset by the benefits of additional irrigation water supplied to the remaining agricultural land. We do not however, see a discussion or analysis that quantifies the increased production or increased value of the agricultural products to be produced.

Thank you for the opportunity to comment; we trust our suggestions will be useful as the final draft is prepared.

BARBARA ROBERTS
Governor



635 Capitol Street, NE
Salem, OR 97310-0110

Sincerely,

Chuck Craig
Chuck Craig, Assistant Administrator
Natural Resources Division
(503) 378-3810

1. Although the fish enhancement numbers have been revised in the final EIS, the increase in fisheries benefits far exceeds the losses. The Oregon Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and National Marine Fisheries Service have concurred that the project will have net positive benefits for fisheries resources.
2. See responses #2 and #3 to R. Crockett letter on page 3.
3. This statement was based on the loss of farmland in the reservoir pool area due to inundation (about 260 acres) compared to the increased irrigation on lands not now receiving sufficient water (897 acres) as well as on lands not receiving any water (3,774 acres). Quantification of acres of agricultural lands to benefit from the project is included on page 3-45 of the Draft EIS. Quantification of dollar benefits is included on page 3-91.

Thank you for your review and comment.

Oregon

DIVISION OF
STATE LANDS

STATE LAND BOARD
BARBARA ROBERTS
Governor
PHIL KEISLING
Secretary of State
ANTHONY MEERER
State Treasurer

January 13, 1992

Regional Environmental Officer
U.S. Bureau of Reclamation
Box 0113 550 West Front Street
Boise, ID 83724

Re: Milltown Hill Project, Douglas Co., Oregon draft
E.I.S. (Elk Creek)

Dear Sir:

The Division of State Lands has reviewed the above referenced project to provide a reliable water supply in the Elk Creek subbasin. The following comments relate our position on the proposed project.

1. The project will require a removal permit from our agency if 50 cubic yards or more of material in removed or altered within the waterway, including wetlands. However, pursuant to ORS 196.800 - 196.990, a permit is not required for filling within the water way for the purpose of constructing, operating, and maintaining dams or other diversions for which water right or hydroelectric permit shall be issued under ORS Chapter 537 or 539, or under ORS 543.010 - 543.620, administered by the Water Resources Department. Fill for activities associated with dam or water diversions for purposes other than operating or maintaining the dam or water diversion (fishways, erosion protection, etc.) require permits under the Removal-Fill Law. Finally, the Geology and Soil section should mention the loss of alluvial deposit mitigation below the dam site.

2. Thank you for the opportunity to comment on the Draft E.I.S. Please contact our office if you have questions or need further assistance.

Sincerely,

William L. Parks

William L. Parks
Staff Biologist

WLP/1s
bil:202



775 Summer Street #16
Salem, OR 97310-1117
(503) 576-3205
FAX 576-1511

1. Douglas County has made joint application for a Removal/Fill permit from the DSL and a Section 404 permit from the Corps of Engineers.

2. Gravels are not commonly found in Elk Creek. Most of the stream bottom materials are bedrock. The presence of the dam is expected to cause minimal loss of gravel recruitment to downstream areas and no loss of deposits for mining. Mitigation and enhancement efforts for fisheries resources will include placement of gravel-sized material in various areas.

Thank you for your review and comment.

Oregon

DEPARTMENT OF
TRANSPORTATION

Highway Division
District 6

FILE CODE

February 3, 1992

Regional Environmental Officer
U.S. Bureau of Reclamation
Box 043 550 West Fort Street
Boise, ID 83724

Re: Milltown Hill Project
DES 91-33

Dear Sir:

The Oregon State Highway Division, District 6 Office, has 2 concerns regarding the Milltown Hill Project.

- 1) The Draft E.I.S. does not mention the increase in traffic due to recreational use and future development. The Highway Division is concerned about functional impacts due to increased traffic at the I-5 freeway interchange at Elkhead Road. The E.I.S. should address these impacts.
 - 2) Figure 3-3-3, Drainage Facilities, indicates a pipeline paralleling the I-5 freeway. If this pipeline is to be installed on highway right-of-way, a permit will be required. Before issuing a permit for longitudinal installations along interstate highways, a "Permit Variance Request" must be completed and approved. I've attached a copy of the information needed in the request. Before a Variance Request can be approved, all possible alternate routes that do not use freeway right-of-way must be evaluated.
1. The DEIS discusses (Section 3.1.22.2, Operation Impacts) increased traffic from development of the project. Traffic volume on Elkhead Road on the east side of the I-5 freeway interchange is about 880 vehicles per day. On the west side it is about 610 vehicles per day. Traffic at the freeway interchange is expected to increase an estimated 71 vehicles per day on weekdays and 215 vehicles per day on weekends. This increase is not expected to have a significant impact on the function of the interchange. The FEIS has been updated to include this information.
2. Douglas County will evaluate alternate routes and apply for a permit for those facilities in the highway right-of-way.

Sincerely,
Ray Cranston

Ray Cranston
District Operations Manager

RC:lh

cc: Terry Cole
Bruce Harrell



PO Box 1046
Roseburg, OR 97470
(503) 444-3405
FAX 444-3478

17

Thank you for your review and comment.

January 28, 1992

Regional Environmental Officer
U.S. Bureau of Reclamation
Box 043 550 West Fort Street
Boise, Idaho 83724

Dear Sir:

We have received and reviewed the Milltown Hill Project, Draft Environmental Impact Statement (DEIS). After reviewing the DEIS, we have found several areas of concern. Our comments are referenced to the DEIS page numbers.

1. Page 2-6, 2.2.2.4 Outlet Works
Oregon Law (ORS 540-350) requires all water storage projects to have provisions for future hydroelectric development. Hydroelectric projects are subject to Division 51 Oregon Administrative Rules (OAR).

2. Page 3-46, 3.1.13.2.1 Construction
The forest acreage data is somewhat confusing. It states that 160 acres would be inundated plus an additional 20 acres would be cut for road relocation. Then it states that not all the timber within the reservoir would be cut (90 acres left as wildlife mitigation near dam & Walker Cr.) and an additional 60 acres (South end of the reservoir) would be preserved to provide wildlife habitat. This sounds as if the 90 and 60 acres are left standing in a flooded reservoir. In addition, charts on the same page indicate a total of 364 acres of forest land is affected. This needs some clarification.

3. The last sentence of this same paragraph appears to compute the value of the forest land lost on the basis of just one resource lost (timber) and that for only 80 years. This is not an acceptable economic analysis. The proper way to compute the value of forest land and resources removed from production is to compute the future values of all forest resources lost on that forest land in perpetuity in terms of discounted present value.

4. Page 3-47, 3.1.13.2.2 Operation
This section states that the operation of the reservoir would not cause any additional loss in forest resources. That is true. However, the construction of the reservoir will affect the management (recreation) of surrounding lands, some of which are forested. This will cause a

Oregon

DEPARTMENT
OF FORESTRY

State Foresters Office



"STEWARDSHIP IN
FORESTRY"

1. Provisions for future hydroelectric development, as required by state law, were described in the draft EIS on page 2-6, 2.2.2.4, Outlet Works, however this is not a hydroelectric project.

2. There are approximately 364 acres of commercial forest lands within the 1192-acre project take-line. Of these 364 acres, 204 acres lie above the 775-foot mean sea level (the normal full pool elevation). Only 20 acres of forest land above this elevation will be cleared for realignment of existing roads and construction of new roads. The remaining 184 acres would remain uncut. Of the 160 acres of forest land within the normal full pool elevation, only 40 acres would be cleared and the timber removed. The remaining 120 acres of standing trees would remain uncut, to provide enhanced habitat for reservoir fish, water fowl and raptors. The FEIS has been updated.

3. The DEIS and FEIS analyzes the direct and indirect impacts of the project on all resources in the area that would be affected. For those resources where direct impacts have been identified, a value has been assigned whenever possible. The intent of the timber analysis was to estimate the loss of timber revenue from the sale of timber over an 80-year rotation period. The Oregon Department of Forestry also provided information on loss of jobs (See response #5 below).

4. The DEIS indicated (on page 3-47) that operation of the reservoir could cause some changes in BLM's management of forested lands adjacent to and near the reservoir. BLM is a cooperating agency for this EIS. No quantitative analysis is available.

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reduction in the harvest of wood from these lands, an additional forest resource loss.

Page 3-47, 3.1.13.3 Mitigation of Impacts to Timber Resources
There is only one sentence under this heading. It states that no mitigation will be done.

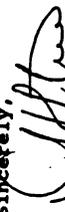
Other natural resources are being mitigated, why is forestry being excluded from mitigation? There is an acknowledged loss of forest land and forest wood growth, yet no mitigation is planned. This is contrary to the purpose and intent of OAR 690-51-000, 690-51-060, 690-51-180 and 690-51-250. Mitigation for forest land and growth lost because of this proposed development needs to be planned via consultation with this Department. Please contact me at your earliest convenience.

Page 3-98, 3.1.24.2 Impacts to Fire Protection
This inadequately mentions that the risk of forest fires will increase. In 1990, recreationists were the largest single class of the public responsible for starting forest fires in Oregon. It does not go into detail as to estimated numbers of forest fires, damages or suppression costs. In addition to the increased number of forest fires, there is also increased vandalism including cutting of nearby trees to start fires. More data needs to be provided on this subject.

Page 3-98, 3.1.24.3 Mitigation of Fire Protection Impacts
The proposed mitigation for the increased number of recreation caused forest fires is that the reservoir and fire hydrants will be able to supply water for suppression of these additional forest fires. Mitigation should consist of some additional annual funds for prevention and suppression programs in the general dam/reservoir area. Annual funding needs to be provided for prevention and control of forest fires caused by the dam/reservoir construction.

Thank you for the opportunity to review and comment on this proposed project.

Sincerely,



David M. Stere, Director
Forest Resources Planning

DHS/BB

5. It is Reclamation's and Douglas County understanding that Chapter 690 applies to hydroelectric projects, only. This is not a hydroelectric project. The relatively small loss of forest land (364 acres) and wood growth is considered a trade-off for other benefits of the project. Based on information from the Department of Forestry, the loss of 364 acres could result in the loss of 2 direct, indirect, and induced jobs at the timbershed level and 3.8 total jobs statewide. The loss is predicted to have only a minor impact on revenues in the local area which would be offset by increased revenues anticipated in other construction- or operation-related activities.

6. Although the risk of forest fires would increase, Douglas County has not experienced increases in fires caused by recreationists at Canyonville, Berry Creek and Galesville reservoirs. It is the County's view that fires at Milltown Hill would not be any more frequent than at these sites. A full-time caretaker at Milltown Hill will help to minimize vandalism and the hydrants on the pipeline would serve forest lands.

7. Douglas County feels that this type of mitigation is not warranted at this time. The County's experience on other reservoir projects has not resulted in a fire problem.

Thank you for your review and comment.

Oregon

MEMORANDUM

DEPARTMENT OF
FISH AND
WILDLIFE



DATE: February 3, 1992
TO: Rick Bastasch
FROM: Stephanie Burchfield *SB*
SUBJECT: Milltown Hill Project, Douglas County
ODFW Comments on the Draft EIS

Attached are the comments of the Oregon Department of Fish and Wildlife on the subject reservoir storage project. Please call me at 229-5410, ext 441, or Rick Kruger at ext 437, if you have any questions on our comments.

c: Jim Fessler, Roseburg
Dave Loomis, Roseburg
Steve Denney, Roseburg
Jim Collins, Roseburg
Ray Temple, Fish Division
Donavin Leckenby, Wildlife Division
Rick Kruger, HCD
Jill Zamowitz, HCD
HCD File - Bureau of Reclamation - Water Project
Studies/N. Douglas County



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Memo: Rick Bastasch
February 3, 1992

Milltown Hill DEIS
Page 1

Comments of the Oregon Department of Fish and Wildlife
on the
Milltown Hill Project, Douglas County, Oregon
Draft Environmental Impact Statement
February 3, 1992

Oregon Department of Fish and Wildlife (ODFW) staff has worked closely with Douglas County, U.S. Fish and Wildlife Service, and Bureau of Reclamation on the impacts of the proposed Milltown Hill project and the mitigation proposals described in the Draft Environmental Impact Statement (EIS).

ODFW was consulted with and involved in the fish and wildlife habitat studies that were performed to evaluate potential impacts and benefits of the proposed storage dam and reservoir. Staff also participated in the development of mitigation plans and review of fisheries benefit estimations.

As a result of the close coordination with ODFW and other resource agencies, ODFW believes that Douglas County has developed a proposed storage project that will result in overall net benefits to fish and wildlife and their habitats. ODFW supports the project and believes that, for the most part, the draft EIS adequately assessed potential impacts and benefits of the project.

There are a number of sections in the draft EIS where ODFW recommends either corrections, modifications, or additions. The following specific comments are organized by page and section numbers in the draft EIS:

Page S-4, Project Functions, Anadromous Fisheries

ODFW believes that storage for fisheries and water temperature control should have the same priority of refill as the other two primary purposes of municipal and industrial and irrigation. The proposed project is not economically feasible without maximum fishery benefits. The effect of a secondary refill priority for the fish and temperature storage space will be lower flow releases and less temperature control in many years, which will result in fishery benefits substantially below those anticipated for the project. Data presented in the DEIS show that storage for fish releases will fill to the full 7,737 acre-foot capacity in only two out of every ten years (Figure 3-8-5). Fish releases will be 16 percent less than full capacity in one of every two years, 22 percent less than full one in every four years, and 35 percent less than full one in every ten years. During these times of water shortage, neither of the other two primary purposes are proposed to share in the shortage. ODFW does not consider this an equitable distribution of benefits for a project that cannot be justified without maximum fishery benefits. ODFW recommends that all three primary purposes contributing economic feasibility for the project share equally in the storage of available water during all water years.

Page 1-4, 1.2.3 Wildlife Habitat

This section is very weak and speaks only in general terms. This section should include specifics on acres affected by the project, how the project area has been altered by past practices, specifically what will be lost as a result of the project, and what mitigation proposals would do to affect losses (wetland losses, Columbian White-tailed Deer, snag management, pond development, berms, etc).

1. The County does not consider that fish resources have a "secondary refill priority". As discussed in the response to comment #11 of the Oregon Water Resources Department (WRD) letter on page 12, only about 60% of the arable land will receive water. Thus, the downgrading for irrigation occurred partially to provide fish enhancement water.

The project will not store or utilize natural flow except when such flow is in excess of that required to meet downstream needs, including existing minimum flows and water rights. Municipal (and industrial) and fish water will have similar priority of fill while irrigation will have the least. To meet "target flow", 5,180 acre feet are needed to supplement releases. The 7,737 acre feet includes the carryover for dry years to meet target flows.

2. This reference is to the "purpose and need" section which was not intended to provide detailed impact information. Chapter 3 of the EIS provides greater detail as requested.

Page 2-5, 2.2.2.2 Storage Allocations

3. The discussion of how instream flows needed for protection of aquatic life will be provided needs clarification. A Certified Water Right for natural flows currently exists for instream flows for the purpose of supporting aquatic life. The proposed project will obtain a water right for stored water, which will allow storage of water in excess of natural flows required to meet all existing senior water rights. As part of the project storage water right, the proposed fish enhancement releases will be in addition to any natural flows required to satisfy the Instream Water Right. This second paragraph in this section appears to say that the instream water right for aquatic life may not be met in order that the project can store water. It also appears to say that the instream water right may be met by a combination of stored water released for other purposes, or by releases of stored water for fish enhancement. If this is the case, ODFW believes that this may not be legal or acceptable. ODFW recommends that this section be amplified to describe exactly how the project will be operated to pass natural flows to meet downstream water rights during all months, store water in excess of this amount, and release additional water for project purposes during specified periods.

Page 2-9, 2.2.2.8 Utilities

4. Will the placement of the power transmission towers and lines cause impacts to birds (e.g., raptors, waterfowl and passerines)? All transmission lines should be constructed so as to eliminate possible electrocution of resident and migrant raptors, following methods prescribed in "Suggested Practices for Raptor Protection on Power Lines" (Olendorff, Miller, and Lehman, Raptor Research Report No. 4, Raptor Research Foundation, Inc., 1981). ODFW recommends that this be addressed in detail in Section 3.1.14 Wildlife Resources.

Page 2-14, 2.2.2.13.1 Reservoir Area Wildlife Habitat

5. The draft EIS is vague in its description of the snag development programs, both here and in Section 3.1.14.3. No specifics are offered such as locations of snag areas, target number of snags desired, or plan to perpetuate snags through time such as planting new trees or creating snags as old trees fall down. There are also no specifics on the number of nest platforms for Osprey and Canada Geese or wood duck nest box structures that will be placed, nor is information provided on who will pay for construction, placement, maintenance, and replacement of these structures over time. It will be necessary to provide this information in a site-specific plan developed prior to initiation of project construction, in accordance with ODFW Fish and Wildlife Habitat Mitigation Policy (OAR 635-415-000 - 030).

Page 2-15, 2.2.2.13.2 Wetlands

6. Would the three-acre log pond purchased by the County north of Yoncalla be for wetland loss mitigation or for loss of wildlife habitat? There are no specifics about what measures will be undertaken to enhance the wetlands at the pond site, time line for the work to be completed, what target species will benefit, and whether or not the recreation site development will impact wildlife use in the area. Again, a site specific plan is needed for adequate review.

Page 2-18, 2.2.2.15 Construction Schedule and Work Sequence, Figure 2.8

7. This graph indicates that all wildlife mitigation work will be completed during July, August, and September of the fourth work year. Some measures such as obtaining habitat within the Columbian White-tailed Deer area, wildlife plantings, and snag development can be

3. See responses to ODFW comment #1 above. In addition, if, in the judgement of ODFW, the flow of Elk Creek is not sufficient, additional enhancement flow will be released and protected by the project water right.

4. A transmission line to provide power to the project would be constructed along Dark Canyon Road. Design would be consistent with "Suggested Practices for Raptor Protection on Power Lines" (Olendorff, Miller, and Lehman, Raptor Research Report No. 4, Raptor Research Foundation, Inc., 1981).

5. Douglas County will develop detailed plans for the wildlife mitigation measures consistent with the concepts that have been discussed in the DEIS and with ODFW and as described by USFWS in their Coordination Act Report. These plans will be prepared prior to and during construction by Douglas County in cooperation with ODFW and USFWS. It is the County's responsibility to pay for construction, placement, maintenance, and replacement of these structures.

6. The three-acre log pond has been deleted as a project mitigation. A decision to remove the log pond from the project was made after further investigation by the County determined that water quality in the log pond was not as they had anticipated based on prior conversations, and that a considerable clean-up liability may be incurred if the pond was part of the project.

7. Douglas County will develop detailed plans for the wildlife mitigation measures and schedule activities for mitigation that do not conflict with construction or that could not be compromised by construction. The County will coordinate the scheduling of mitigation activities with ODFW and USFWS.

accomplished before this time. ODFW recommends that the County modify its wildlife mitigation work plan, in consultation with ODFW, to begin implementation of some of the measures as soon as possible.

Pages 3-20 - 23, 3.1.8.1 Existing Surface Water Quantity

This section needs more clarification of minimum flows. Does this refer to the minimum perennial stream flows established in 1974 that were converted to instream water rights in 1989? Although these flows are indicated in Figure 3-8-1, the amount of each monthly instream water right should be listed in a table, or perhaps incorporated in Table 3-8-1. It would also be helpful to have the numerical values for pre-1974 and post-1974 displayed in Table 3-8-1 for the entire water year. The amount of flow available and the water rights for the entire year are relevant because the proposed project will impact streamflows throughout the year, and data presented in the Impact assessment section indicate that senior water rights for natural flow may be violated during part of the storage period. The discussion of water rights in this section should indicate that all existing rights are for natural flows, and that the proposed project would obtain a new water right for storage during the fall, winter and spring.

Pages 3-23 -24, 3.1.8.2.2 Operation

The last sentence of Paragraph 1 states that winter flows in excess of those needed to meet instream flow requirements would be stored in the reservoir for release later in the year. The instream water right for the reach below the diversion site is for 70 cfs from November through April, and 10 and 30 cfs in October. ODFW assumes that these are the flows that the County intends to release during the winter months. As recommended above, the DEIS should identify these flows in a table and state that the flows will be passed at the project.

ODFW recognizes that the Instream Water Right is for the reach of Elk Creek from Curtis Creek (RM 33.8) to Pass Creek (RM 24.2), and is measured at the gage above Pass Creek (RM 26.2). ODFW also recognizes that something less than the full Instream Water Right flows are contributed by the watershed above the proposed damsite. ODFW recommends that County consult with ODFW and WRD to determine how much water must be passed at the project in all months in order to ensure compliance with the Instream Water Right and any other senior natural flow rights.

ODFW supports Douglas County's plan to allocate a portion of the stored water to meet instream flow needs. ODFW is uncertain how the stored water will be used to augment natural flows already protected as an Instream Water Right. ODFW considers that there is a difference between the flows specified in the Instream Water Right and the instream flow needs of fish and other aquatic life in Elk Creek, particularly during the summer months. The Instream Water Right that was converted in 1989 from the 1974 Minimum Perennial Streamflows were not as high as ODFW requested. ODFW requested as minimum flows 10 cfs in July, August and September. ODFW believes that these are minimums and that additional flow is necessary to approach good habitat conditions. Water stored for fishery enhancement and temperature control would be released in addition to any natural flow that may happen to be present, if any, in an effort to improve habitat conditions over minimum levels. Flows released from storage for other purposes will also contribute toward improved habitat conditions, but it is uncertain how dependable these benefits will be over the life of the project.

The text does not describe whether the amount of water allocated for other uses such as municipal, industrial, and irrigation will also be decreased during low water years. ODFW

8. The text has been revised to clarify that minimum flow refers to instream water rights. Table 3-8-1 has been revised to include instream water rights.
Douglas County will operate the reservoir to avoid violation of water rights during the storage period.

9. The County will meet streamflow releases as required. See response #1 and #8 above.

10. The County will consult with ODFW and WRD. This is an environmental commitment (See: Appendix B).

11. Releases for prior rights will not be affected. When natural flows to the reservoir are above prior rights, water will be stored. When natural flows are below prior rights, the natural flows will be released.

Douglas County has allocated water for fish enhancement. ODFW will have sole discretion on how these flows are released for fish enhancement.

believes that in low water years, all users should share the shortage rather than placing all of the burden on the fisheries and aquatic resources. The exact methodology for determining how this allocation is decreased must be developed as part of the environmental assessment and estimation of fishery benefits. Once the project is operational, annual, pre-season coordination between the County, ODFW and WRD will be necessary to establish flow regimes and operational parameters to guide flow releases and avoid disputes during the course of each water year. The draft EIS should be revised to reflect this concept and describe how it will be implemented.

13. Tables 3-8-5 and 6 show Total Project flows at the dam (7 and 10 cfs, respectively) that are less than existing natural flow (22 and 25 cfs, respectively) during May. This would indicate that storage is occurring in the reservoir during May. This will reduce the flow in Elk Creek in the reach where there is an Instream Water Right for 50 cfs in May. The tables show that the Instream Water Right is met at Boswell Springs, the point of measurement. As stated above, ODFW would expect that something less than the full 50 cfs would be contributed by the watershed above the damsite, and would not expect all of the natural flow in May to be needed to meet the Instream Water Right. However, the DEIS lacks adequate information to determine what the level of release from the dam would have to be to ensure that the Instream Water Right is met. Furthermore, all of the discussion of project flows to this point has been based on average monthly or annual values. If Tables 3-8-5 and 6 are also based on average monthly flows, it is likely that instantaneous flows could fall below the Instream Water Right for short to moderate periods and not be reflected in average monthly values. In other places in the DEIS, the County commits to operating the project in compliance with the existing water rights, including the Instream Water Right. ODFW is concerned that the level of detail and the time step of the proposed flow regimes lacks adequate resolution to evaluate the proposed flow regimes and their compliance with other water rights. ODFW recommends that a more detailed analysis and display of project operations be presented in the DEIS, for the entire year, so that potential conflicts such as the one above for May can be identified and avoided.

14. Paragraph 4 of this section the County proposes a "target" flow release of 5 cfs from the dam, 45 cfs at Boswell Springs, and 15 cfs at the mouth of Elk Creek. The precise nature of a target flow is not described. In ODFW's experience, target means something that will be achieved, if possible, but no guarantee is made that it will be achieved. ODFW has not found the target flow concept acceptable in other recent situations. Given that natural flows are low or absent during July through September, and the project will be releasing stored water to augment natural flows, a target flow concept may be acceptable for the proposed project during the months of July, August and September. However, as expressed above, ODFW is unclear on exactly how the project will be operated to ensure compliance with the existing Instream Water Right throughout the year, and how the fish flow storage allocation will be used for augmentation. The Instream Water Right or inflow (whichever is less) must be passed during all months and should not be deducted from the fish flow storage allocation. When stored water is released for flow augmentation, it should be in addition to any natural flow present, and ODFW should determine the volume and pattern of fish flow releases. ODFW requests that the proposed target flow concept be defined in the DEIS and that a more detailed explanation of proposed operations and storage and release schedules be provided in the DEIS.

Page 3-24, 3.1.8.2.2 Operation

15. An assessment of the impact of the proposed project on flood control and the reduction of flood damage is not presented. Section 3.1.8.1 Existing Surface Water Quantity includes a detailed discussion of existing flooding and damage conditions in Elk Creek, including flood frequency,

Douglas County agrees that coordination is needed and strongly supports annual or more frequent meetings. See response to comment #10 above.

13. These tables were prepared as a simple example of how the project could affect flows during the summer months. They were intended to show low and average water years with fish enhancement flows that would have been available. The fish enhancement flows were distributed arbitrarily. The distribution of fish enhancement flows will be at the discretion of ODFW. All water rights, including instream water rights, will be met on a seniority basis and enforced by the water master.

14. The project was sized based on "target flows" which the computer analysis attempted to meet. Under these assumptions, a target flow of 5 cfs at the dam was met 100% of the time; a target flow of 45 cfs at Boswell Springs is met 95% of the time; and a target flow of 15 cfs is met 98% of the time at the mouth. Since the natural flows during summer is considerably less than those proposed as target flows, the fish resources should benefit. Also, see response to comment #1 above.

ODFW will have sole authority for release of flows stored for fisheries enhancement. A more detailed plan will be prepared and a memorandum of agreement will be prepared between County and ODFW prior to project operation. See response to comment #10 of WRD letter on page 12.

15. A flood control study was made by Douglas County and the U.S. Army Corps of Engineers. Based on that study, flood control benefits from the project are relatively minor. The minor flood control benefits did not justify additional discussion in the DEIS.

volume and associated monetary damage. Since flood control benefits are claimed for the project, as part of its justification, it seems appropriate to include an assessment of the reduction in flood frequency, volume and damage as part of the surface water quantity impact assessment section.

Pages 3-26 - 27, 3.1.8.3 Mitigation of Impacts to Surface Water Quantity

16. This section briefly identifies the 7,737 acre-feet of stored water as a benefit to fisheries resources by increasing summer flows and lowering summer water temperatures. It also mentions that the County and fish and wildlife agencies will develop a plan for release of the stored water. ODFW agrees that this plan is needed to avoid in-season disputes, however, ODFW had been led to believe that the fish and wildlife agencies would have nearly complete control over how and when to release the stored water allocated for fisheries resources. For this reason, the draft EIS should state that the plan should be developed by the fish and wildlife agencies and reviewed by Douglas County to assure that the plan is consistent with dam safety and flood control requirements. ODFW anticipates that the flow plan will set out general guidelines of the volume and rate of "fish flow" releases for each month, yet the plan will allow for these flows to be adjusted within a season and between years based on results of monitoring of fish presence, water quality, and water quantity supplied by release of stored water for other purposes.

17. Another concern that is not dealt with in the draft EIS is how the flow releases for fisheries resources will be protected from downstream diversions. While Water Resources Department holds instream water rights (on behalf of ODFW) with a priority date of 1974 for Elk Creek, these are rights to natural flow. The releases from storage, while intended to meet the instream flow needs, will actually be given water rights as stored water. Legally, downstream diversions, regardless of their priority date for natural flow, will not have a right to divert the stored "fish flows." The project operation and monitoring plan that will be prepared should include mechanisms to insure that the fish flows are not subsequently diverted for out-of-stream uses.

Page 3-31 - 32, 3.1.9.2.1 Construction Impacts to Water Quality

18. This section indicates that the pipeline will be buried along an existing road. The text states that the pipeline would make ten stream crossings, and then lists fifteen locations: three on Elk Creek, six on Yoncalla Creek, and six on several other tributaries to Elk Creek. This inconsistency should be corrected. Moreover, an effort should be made to avoid stream crossings where possible.

19. On page 3-32, the construction of the trenches to bury the pipeline under the streambed is summarized. In the construction plan proposed in these comments under section 3.1.9.2.1, page 3-56, designs of these trenches should be included and measures to assure that fish passage is not impaired by the buried pipeline described.

Page 3-33 3.1.9.2.2 Operation

20. The first paragraph on page 3-33 is unclear in its reference to "released material". ODFW assumes this means phytoplankton and zooplankton or other forms of organic material that will be produced in the lake environment and released to the downstream environment. However, the preceding discussion in the DEIS is concerning physical conditions in the reservoir and makes no mention of planktonic production. Within this context, it could be taken that the

16. A Memorandum of Agreement will be developed between Douglas County and ODFW for storage and release of the stored water. ODFW would have control over the storage and release of water allocated to fish.

17. The downstream water users will not have and cannot obtain a water right for these waters released for fish enhancement. The water master will regulate the diversion of water.

18. Number of stream crossings (15) have been minimized to the extent possible. The inconsistency has been corrected in the final EIS.

19. Pipeline trenches will be designed to minimize impacts. Measures to minimize impacts will be provided in detail in the application for the Section 404 permit.

20. "Released Material" refers to any material that could be used by aquatic organisms as a food supply. This includes phytoplankton and zooplankton as well as any organic or inorganic material. The focus was to describe that an increase in aquatic invertebrates would be expected because of these releases. The text in the final EIS has been revised.

"released material" is referring to inorganic materials. ODFW recommends that the clarity and context of this discussion be improved.

Page 3-48, 3.1.14.1 Existing Wildlife Conditions

21. The list of furbearers should also include Bobcat.

Page 3-52, 3.1.14.3 Mitigation of Impacts to Wildlife

22. The County discusses restoration of the project site with plantings, fencing, etc., but does not provide any specifics on the project such as location, species involved, and maintenance over time or monitoring to see if restoration accomplishes the objectives. A detailed wildlife mitigation plan should be developed by the County and approved by ODFW prior to project construction that describes each of the measures that will be implemented, when this work will be accomplished, and how maintenance and monitoring will take place.

23. Paragraph 3 does not describe how the proposed islands in the pond development will be constructed. Will the islands be rip-rapped to prevent erosion and deterioration of the island sites? ODFW recommends that this level of detail be included in the wildlife mitigation plan.

24. The discussion regarding mitigation of impacts to wetlands in sections 3.1.11.3 (Vegetation) and 3.1.14.3 (Wildlife) raises several questions. First, creation of 23 acres of wetland by excavating or berming 10 to 15 ponds in the upper end of the proposed reservoir raises questions of effectiveness and long term maintenance. The ponds will alternately be inundated (potentially for long periods) and exposed. During periods of inundation and partial inundation, ODFW is uncertain that planted vegetation will 1) survive, and 2) provide effective protection against wave action erosion of the berms. During periods of exposure, ODFW is uncertain how water levels necessary to create and sustain wetland characteristics will be maintained. Based on information presented in the DEIS, ODFW is not confident that proposed wetland mitigation measures will be successful or sustained over the life of the project. Second, wetlands are considered wildlife habitat of high value, and are subject to provisions of ODFW's Fish and Wildlife Habitat Mitigation Policies (OAR 635-415-000 to -030). It is presently standard practice to mitigate for wetlands lost on an acre-for-acre basis. The DEIS proposes to mitigate for the loss of 31 acres of wetlands with 23 acres of created wetlands, which is substantially less than acre-for-acre replacement. Justification for the discrepancy in the DEIS is that the created wetlands will be of "high quality" compared to the lost wetland areas. ODFW may find this trade-off acceptable, if the created wetlands in fact are effective and provide replacement of equivalent wetland functional values. However, information is not presented in the DEIS which depicts the comparative functional values or demonstrates that the proposed created wetlands will be successful and/or maintained over the life of the project. ODFW recommends that additional information and analysis be incorporated into the DEIS that addresses the above concerns.

25. Paragraph 4 indicates that Osprey platforms and wood duck boxes will be built in the Walter Creek arm, yet it fails to provide specifics on the number of platforms or boxes that will be placed.

26. There should be more discussion in on the existing habitat conditions and habitat enhancement for the Western pond turtle. This animal is a Federal category 2 candidate species, and a petition has recently been filed with the US Fish and Wildlife Service to list the turtle as threatened under the Endangered Species Act. ODFW anticipates that the species will be listed before the project is completed. The turtle is also an Oregon Listed Sensitive Species. As a

21. Bobcat has been added to the list.

22. The intent was to identify measures that could be implemented. Implementation would be on private property and would require land owner permission and or cooperation. The County will take the lead in developing a program for identifying degraded areas, possible restoration measures, and funding sources. Such measures are now funded through the County SHIP program; the state STEP program; and the state GWEB program.

23. The wildlife mitigation plan will include this level of detail. See response to comment #5 above.

24. The application for the Removal/Fill permit from DSL Section 404 permit from the Corps will detail the location design, size, water depths, plants, and anticipated maintenance. The creation of 23 acres of wetlands of "high" quality compared to the loss of the 31 acres considered to be of low quality more than mitigates the loss. Water levels will be sustained considerably longer in the created wetlands than in the present wetlands which are dry by late spring. A detailed plan will be prepared for the permit application to address these concerns.

25. The specifics will be identified in the wildlife mitigation plan that the County will prepare in consultation with ODFW and USFWS. See response #5 above. The plan will indicate the number of platforms and boxes and the possible locations contingent upon removal of timber for safety considerations.

26. The petition was filed January 15, 1992 after the DEIS was prepared. The County will implement a survey to identify western pond turtle habitat and the presence of the species. If the species is subsequently proposed for listing or listed as a

Sensitive Species, under ODFW's Habitat Mitigation Policy, habitat for the Western pond turtle is considered Category 2, which requires no net loss of habitat and a detailed mitigation plan. If listed under the Endangered Species Act as either threatened or endangered, the habitat category would become Category 1, which requires no loss of habitat. There is virtually no discussion of existing habitat amounts, distribution or conditions for the Western pond turtle and only very vague references to net positive effects on habitats by the project, in either the wildlife resource or endangered species sections. Considerably more information and analysis should be incorporated to make the assessment adequate. The County is referred to a recent report on the Western pond turtle for additional information (Holland, Dan. C., 1991). A synopsis of the ecology and status of the Western pond turtle. University of Southwest Louisiana, Lafayette, LA. 141 pp.) Additional consultation with ODFW on mitigation measures will likely be required as part of providing the requested additional detail for the DEIS.

27. With regard to the discussion of the snag development in the Walker Arm area, who will be responsible for determining which hazard trees need to be removed? Can the tops be removed and the trunk sections left for wildlife habitat needs? ODFW would like to be involved in these decisions. As with several other resource mitigation matters, a mitigation plan will be necessary to establish and guide the mitigation efforts for snag development and long-term management. The County is referred to ODFW's Habitat Mitigation Policy for more information on mitigation requirements and preparation of mitigation plans (OAR 635-415-000 to -030).

28. ODFW is very supportive of Douglas County's commitment to providing secure habitat for Columbian White-tailed deer, which is required to delist the species under the Endangered Species Act. ODFW requests that the County consult with ODFW wildlife biologists in Roseburg in identifying lands to be secured, initiating landowner contacts, and securing habitat for Columbian White-tailed deer. ODFW also requests that a detailed plan for securing Columbian White-tailed deer habitat be developed that would include timeline, procedures, and specific areas, along with other requirements of mitigation plans, as discussed below.

29. Paragraph 6 describes management of the upstream end of the reservoir as a wildlife habitat area for both game and nongame wildlife. ODFW supports the decision to allow hunting in the project area.

Page 3-54, 3.1.15.1 Existing Fisheries Resources

30. ODFW agrees with this description of existing fisheries resources and fish habitat. Limited spawning and rearing habitat, caused by low summer flows, warm water temperatures, and a lack of gravel, riffles, and other instream structures, has resulted in low productivity of both resident and anadromous species.

Page 3-56, 3.1.15.2.1 Construction Impacts to Fisheries, Resources and Habitat

31. ODFW agrees with the estimated annual production loss of 50 adult coho and 50 winter steelhead as a result of installing the dam without fish passage facilities. Although fish passage is usually required at new impoundments, ODFW agreed with Douglas County that proposed fisheries mitigation measures are expected to result in much improved natural production of anadromous and resident fish.

32. Paragraphs 2 through 4 describe construction impacts as minimal. ODFW recommends that construction impacts be avoided where possible and that a construction plan be developed and reviewed by ODFW at least six months prior to initiation of construction. This plan should

threatened or endangered species, Reclamation in conjunction with Douglas County will consult with USFWS and ODFW and provide a more detailed biological assessment for the western pond turtle.

27. The hazard trees that will be removed will be those that affect public safety. The County will make the decision to remove trees that may be a liability because of public safety concerns. BLM, ODFW and USFWS will be consulted during the development of the detailed mitigation plan.

28. Douglas County will identify lands in consultation with ODFW and USFWS that could be secured for white-tailed deer. The County also will prepare a plan prior to and during construction that describes procedures, criteria, and time frames for the identification and securing of these wildlife mitigation lands. Douglas County intends to secure land through deed covenants, not purchase of private property.

29. No response needed.

30. No response needed.

31. No response needed.

32. Application for Division of State Lands Removal/Fill and Corps Section 404 permits will address most, if not all, of the construction concerns. Other construction plans will be developed, as appropriate, during application for other permits for the project.

provide details of construction of the coffer dams, diversion structure, road crossings and pipeline crossings, as well as provide descriptions of how erosion, water quality impacts, and riparian and stream habitat damage will be avoided. As noted for page 3-32, the pipeline should be routed to minimize river crossings and impacts to riparian habitats and wetlands.

Pages 3-56 - 60, 3.1.15.2.2 Operation Impacts to Fisheries

33. This section describes the stored water that will be available to benefit instream aquatic resources. Please refer to ODFW comments above with respect to providing more information on how the project will be operated in compliance with existing water rights and how water will be stored, allocated and released for fishery enhancements.

34. ODFW concurs with the County's understanding that ODFW would receive a new instream water right for stored water, which will be issued by the Water Resources Department (page 3-59). ODFW also concurs with the County that the time and amount of stored water release will be at the discretion of ODFW, and could occur at any time of the year for enhancement of spawning, rearing, passage or attraction, depending on management objectives.

35. On page 3-60, the draft EIS discusses the mitigation measures that are proposed to improve stream habitat, riparian habitat, and fish passage at Cunningham Dam. ODFW supports these mitigation measures and believes that they will result in increased fish production for both resident and anadromous fish as well as promote biological diversity in the Elk Creek ecosystem.

Page 3-61, Tables 3-15-2 and 3-15-3 Estimation of Fishery Benefits

36. ODFW believes that the project will provide net fishery benefits and should be developed.

Pages 3-61 - 63, 3.1.15.3 Mitigation of Fisheries Impacts

37. ODFW generally agrees with the text in this section, provided that the recommendations made with respect to previous sections are adopted in the final EIS. Additionally, this section should indicate that the fisheries mitigation monitoring and evaluation plan will be developed by Douglas County, and reviewed and approved by ODFW as soon as possible. Some portions of the monitoring program are already being implemented, and the plan needs to describe how and when these and other portions will proceed.

38. Further, this section needs to indicate which of the mitigation measures can and will be implemented prior to project construction.

Page 3-63, 3.1.16 Threatened and Endangered Species

The U.S. Fish and Wildlife Service has upgraded the Western Pond Turtle to a Category 2 species.

39. The form and content of this section is not consistent with previous sections on wildlife and fisheries for description of existing resources, assessment of impacts, and development of mitigation measures to address adverse impacts. In its present form, this section does not provide adequate information on existing resources, impacts and mitigation measures to support conclusions that habitats for the Western pond turtle and Umpqua chub will or may be enhanced by the proposed project. Information to support these conclusions is also not presented in the wildlife or fish resource sections. The Western pond turtle is an Oregon listed Sensitive Species,

See response #18 above.

33. See response #11 to WRD comments on page 12.

34. ODFW would apply to the Water Resources Department for a water right. The discretionary release applies only to that water stored for fish enhancement and not to water stored for other purposes.

35. Although the County would evaluate, in consultation with ODFW, USFWS, and NMFS, the impact of Cunningham Dam on the success of fish enhancement efforts, the redesign and any refurbishing would be the responsibility of the dam permit holder rather than the County. Current state statutes require that ODFW take appropriate action, if needed.

36. No response needed.

37. The text of the final EIS has been changed to indicate that details of the fisheries mitigation and enhancement plan, and the monitoring and evaluation plan will be developed by Douglas County in consultation with ODFW, USFWS, and NMFS.

38. Fisheries mitigation measures proposed prior to construction are most likely limited to plan preparation for supplementation and initiation of supplementation activities. Consultation with ODFW, USFWS, and NMFS will be initiated prior to construction.

39. The form and content is different because of the Endangered Species Act requirements. A separate biological assessment was prepared by BR for threatened and endangered species to comply with Section 7 of the Endangered Species Act. The biological assessment was reviewed and approved by USFWS. The biological assessment addressed all listed species and candidate species, including the western pond turtle and Umpqua chub. This section will be updated to reflect the completion of the biological assessment, USFWS's biological opinion and the petition for the western pond turtle.

which places it in Oregon Habitat Category 2, and requires a detailed mitigation plan ensuring no net loss of habitat and achievement of full mitigation within 5 years of project approval. While the Umpqua chub is not presently listed as a Sensitive Species, ODFW is quite concerned over habitat protection for the chub. If either species becomes listed as threatened or endangered the habitat category will be elevated to Category 1, which does not permit any habitat loss. ODFW recommends that detailed impact assessments and descriptions of proposed mitigation measures and mitigation plans be incorporated into the DEIS, in either the Threatened and Endangered Species or respective wildlife or fish resource sections.

Page 3-64 3.1.16.1.2 Columbian White-tailed Deer

40. The Roseburg population is currently estimated to be 6000 White-tailed Deer (Steve Denney, ODFW, personal communication, 1992).

Mitigation Plans, Monitoring and Maintenance

41. Several plans for mitigation of fish, wildlife, wetlands, project operations, and others are referred to in the preceding comments. In addition to these mitigation plans, a number of protection plans are also necessary for the construction phase. These plans are separate documents that will be prepared by Douglas County, reviewed and approved by WRD, ODFW, DEQ or other agencies as part of construction and operation of the project. Plans that will be required can generally be grouped into construction phase protection plans and operational phase mitigation and protection plans. Construction phase protection plans include, but are not limited to: detailed final designs, construction plan, transmission line raptor-proofing and right-of-way management, a plan for control of erosion, sediment, and dust, and and slope stability, water quality monitoring, construction waste and hazardous materials control, spoils disposal, project roads and construction facilities. Operational phase protection and mitigation plans include, but are not limited to: fish mitigation, wildlife mitigation, wetlands mitigation, riparian habitat mitigation, reservoir area wildlife habitat management, and project operation and management.

42. Mitigation and protection plans should be prepared in accordance with ODFW's Fish and Wildlife Habitat Mitigation Policies (OAR 635-415-000 to 635-415-030). The plans should: 1) describe the location, physical and operational characteristics, and duration of the proposed project, 2) describe the fish and wildlife species and habitats to be affected by the proposed project, 3) describe the nature, extent, and duration of the impacts expected to result from the proposed project, 4) describe the mitigation measures which shall be taken to achieve the fish and wildlife habitat mitigation goals and standards of OAR 635-415-030, 5) complement and not diminish mitigation provided for other development actions, 6) describe standards and methods for post-development monitoring of the effectiveness of mitigation measures, 7) provide for future modification of the mitigation measures that may be required to meet the goals and standards established by the plan, and 8) be effective throughout the lifetime of the proposed project. ODFW anticipates including the requirement for these plans as conditions of the water right that Douglas County will obtain from the Water Resources Department.

Conclusion

43. Overall, ODFW is very supportive of the project and believes that it will provide significant benefits to fish and wildlife species. ODFW recommends, however, that the draft EIS be revised to require detailed mitigation plans as well as mitigation monitoring and maintenance plans. These plans should be developed in consultation with and approved by ODFW prior to initiation of project construction. Additionally, many of the mitigation and monitoring measures can and should be implemented prior to construction.

A detailed mitigation plan will be prepared for the western pond turtle prior to and during construction as other wildlife mitigation measures are developed.

40. The text in the final EIS has been revised.

41. Construction plans will be prepared as appropriate during application for various permits. See response #32 above. Operation plans will be prepared as appropriate prior to and during construction of the project.

42. Mitigation plans will be prepared in coordination with ODFW and USFWS for fish and wildlife resources. Previous documents including the EIS, USFWS Fish and Wildlife Coordination Act Report, biological assessment for threatened and endangered species, and other supporting documents have been prepared and can be used for the basis for the mitigation plans.

43. Reclamation agrees that detailed mitigation plans are necessary. These plans will be prepared prior to and during construction of the project. The implementation of mitigation and monitoring measures prior to construction may be counter productive, although the planning for such measures should be implemented. Douglas County will be responsible for the mitigation and monitoring plans.

Thank you for your review and comments.



United States Department of the Interior

NATIONAL PARK SERVICE
Pacific Northwest Region
83 South King Street, Suite 212
Seattle, Washington 98104



L7619 (PNR-RE)
DES-91/0033

IN REPLY REFER TO:

Memorandum

To: Regional Director, Bureau of Reclamation, Boise

From: Associate Regional Director, Recreation Resources and Professional Services, Pacific Northwest Region

Subject: Draft Environmental Impact Statement - Willtown Hill Project, Douglas County, Oregon

1. The draft Environmental Impact Statement (EIS) is incomplete in its consideration of cultural resources for the preferred project alternative, i.e., the construction of the Willtown Hill dam at site 12 on Elk Creek, and it does not address the potential cultural resource impacts of the other alternative locations considered. It is evident that the dam will involve the construction of a large number of structures or other features that will disturb the landscape. Yet not all of these features have been surveyed, and National Register-eligibility determinations have not been obtained for the prehistoric and historic resources located thus far. All such features will require archeological survey except as may be specified by the State Historic Preservation Officer (SHPO).

The draft EIS should describe the agency's efforts to locate all cultural resources that will be, or may be, affected directly or indirectly by the project. Specifically, it should contain maps indicating the project areas surveyed and levels of coverage; photographs of these areas; a discussion of the survey methods, conditions, visibility, and coverage; and explicit professional or other justification for not surveying any affected areas now or at any time. It should also contain evaluations of the significance and National Register eligibility of located cultural resources.

3. Cultural resources such as sites, places, use areas, materials, or objects of importance to Native American or other ethnic groups should also be investigated with respect to Section 106 of the National Historic Preservation Act (36 CFR 800), National Park Service Bulletin #38 "Guidelines for Evaluating and Documenting Traditional Cultural Properties", the Native American Graves Protection and Repatriation Act, and the American Indian Religious Freedom Act. The draft EIS should document agency consultation with such groups and the SHPO to locate such resources, determine their National Register eligibility, and decide their best treatment.

1. The EIS addresses the impacts of only the preferred alternative and the no action alternative. All other alternative studies have been excluded from further consideration.
2. Douglas County has implemented contracts for cultural resources evaluations since 1988. There was a Class 1 survey in 1988 and a Class 3 survey conducted in 1990. Since that survey, studies have continued in consultation with Native Americans, SHPO, BLM, and Reclamation. Various levels of exploratory testing are underway on high probability sites to select sites for formal testing. Formal testing would be done to determine eligibility of sites to the National Register. Mitigation (data recovery) would be conducted on sites nominated. The text of the final EIS has been updated to describe testing, monitoring, and consultation processes as well as compliance with Section 106.

3. See response #2 above.

4. The draft EIS suggests that the traditional surface archeological survey was not effective in locating cultural resources in the project area because of visibility problems. It states (page 3-70) "heavy vegetation obscured the ground surface during the survey and may have prevented detection of some archeological sites" and "prehistoric archeological material was discovered in three locations where the vegetation had been removed (recorded as sites 35D049, D0456, and D0451)...." We are concerned that these three prehistoric sites were found only where the land in the area of the proposed reservoir was exposed and that they represent the total number found by the surveys to date. Under the circumstances, it is doubtful that the Section 106 investigations could be considered complete until followup subsurface probing or testing and/or resurvey is done in all project areas where cultural resources may be present but obscured by vegetation, duff, soil, or shallow surface deposits. The final EIS should describe the results of the followup investigations or include a plan to carry them out, either prior to construction or after the reservoir is filled and drawn down.

4. See response #2 above.

5. The final EIS should summarize the key elements of a mitigation program developed in consultation with the SHPO and reflected in a signed Section 106 Memorandum of Agreement. The program should include a research design; a plan for further survey and testing needed in the project area; a plan for data recovery on sites that address needs defined by the research design; a plan for recording historic buildings or other structures prior to their demolition; a plan for long-term management of all cultural resources, including those determined to be significant to Native Americans or other ethnic groups; a plan for monitoring and treating cultural resources discovered during construction or reservoir operation; a plan for treating human remains and grave goods that may be exposed on Federal or other land during the investigations or the reservoir operations; and a plan for curation. The final EIS should also specify how the agency's Section 106 and other statutory obligations will be fulfilled on Bureau of Land Management lands that would be affected by the project.

5. See response #2 above.

Richard L. Winters
Richard L. Winters

Thank you for your review and comments.



United States Department of the Interior
FISH AND WILDLIFE SERVICE

911 N.E. 11th Avenue
Portland, Oregon 97232-4181

February 12, 1992

Memorandum

To: Regional Director, U.S. Bureau of Reclamation
Boise, Idaho

From: Regional Director, U.S. Fish and Wildlife Service
Portland, Oregon

Subject: Review and Comments to the Draft Environmental Impact Statement for
the Milltown Hill Project, Douglas County, Oregon

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Impact Statement (DEIS) for the Milltown Hill Project, Douglas County, Oregon. The following comments are provided for your use when preparing the Final Environmental Impact Statement (FEIS). Our Portland Field Office has been actively involved with ongoing planning and evaluation of the Milltown Hill Project for several years.

GENERAL COMMENTS:

Generally, the DEIS adequately describes and documents the planning effort, study results, potential environmental impacts of the proposed action, and appropriate mitigation measures for this project. Portions of the Service's Fish and Wildlife Coordination Act Report for the project (dated August, 1990) have been incorporated throughout the DEIS.

The Service supports the Milltown Hill Project as a viable and reasonable water resources development proposal to meet the needs of northern Douglas County, Oregon. It includes enhancement opportunities, and identifies measures to mitigate impacts to fish and wildlife resources and wetlands. The opportunities to enhance anadromous fish runs in Elk Creek are significant, and securing additional habitat would benefit the endangered Columbian white-tailed deer.

In addition to discussing fish and wildlife measures conceptually throughout the draft document, details should be provided on design, location, timing, or other specifics of implementation. As the project proceeds through advanced design and early construction phases, we recommend that close coordination would be maintained among the Bureau of Reclamation, Water Resources Department of Douglas County (WRD), and the resource agencies to insure that fish and wildlife measures are implemented concurrently and proportionately with the other project features.

In addition to the concerns of the Oregon Department of Fish and Wildlife (ODFW), we are concerned about the level of anadromous fish benefits that have been identified for the project. Specifically, our concerns include the

1. Mitigation and enhancement measures for fish and wildlife resources are environmental commitments for the project. Detailed plans will be prepared prior to and during early construction as final design is continued. They will be implemented proportionately with other project features as feasible. See response #42 to ODFW comment on page 29.

2. Consultation has occurred with ODFW, NMFS, and USFWS for the past several years to determine fish benefits that might be expected to occur with the project. The numbers have been revised after discussions with ODFW and are in the Final EIS.

levels of anadromous fish escapement and associated catch to the escapement ratio. As part of the ODFW's ongoing Umpqua River Basin fish planning efforts, project enhancements to anadromous fish may not be consistent with, and are considerably higher than, the objectives that the ODFW can justify for the Elk Creek System. The ODFW, the Service, the National Marine Fisheries Service (NMFS), and the WRD, as well as its consultant, are cooperating to resolve this issue by developing mutually agreeable fish benefit numbers for the project. The revised anadromous fish analysis of benefits should be addressed in the FEIS.

SPECIFIC COMMENTS

3. Page S-4, Project Features, 1st paragraph. The cooler waters during the fall and winter periods would negate benefits from the project's water temperature control feature for spawning or incubation life stages of anadromous fish species in Elk Creek. Conversely, because of warmer water during late spring and throughout summer, the temperature control would be expected to influence rearing life stages for these species as shown in Figures 3-9-1 through 3-9-4 (page 3-30). The FEIS should clarify how temperature control would influence anadromous fish life stages.
4. Page S-8, Wetlands Mitigation, 2nd paragraph. It is stated that project drainage would not occur, yet on page 2-7 a project drainage system is defined as part of the project. This should be clarified in the FEIS.
5. Page 1-3, Anadromous Fish, 2nd paragraph. Reduced temperatures with the project would not be expected to occur during the spawning time period for anadromous fish. Refer to the page S-4 comments above. On page 1-6, the time periods when temperatures are a problem do not correspond to spawning time periods for anadromous fish, with the possible exception of fall chinook in October. However, during this time period flow releases are not provided from the project (Tables 3-8-5 & 6). Therefore, the possibility of influencing spawning by reduced water temperatures seems small. The FEIS should clarify how decreased water temperatures with the project would improve spawning and egg incubation life stages.
6. Pages 2-7 & 2-8, Drainage System, 4th paragraph. This section states that there would be no project drainage or other modifications to affect wetlands and that surface drainage, filling depressions, or sub-surface drainage would be used "to prevent intermittent surface ponding and aggravation of root-zone excess moisture conditions." Impacts to wetlands would be avoided by a county enforced wetlands protective clause. However, the number of potential wetlands impacted by these actions should be disclosed, and the ODFW and the Service should be involved in the development and coordination of the wetlands protective program. The FEIS should analyze the potential wetland impacts from the full irrigation practices (including drainage), and provide options to mitigate these potential losses.
7. Page 2-15, Figure 2-5, Wildlife & Fisheries Mitigation. This figure should clarify that the land in section 28 would also be managed for terrestrial wildlife. This land, which is identified with the diagonal lines as "south of reservoir managed for terrestrial wildlife", also includes that area east of the reservoir between the pool and Romie Howard Road.

3. The draft EIS provided an impact analysis of how temperature control could influence anadromous fish life stages (pp. 3-58 to 3-60). The analysis has been expanded in the final EIS.

4. The statement on page S-8 refers to drainage of jurisdictional wetlands. A drainage system may be needed to provide optimum soil moisture conditions in areas that are not jurisdictional wetlands.

5. The flow scenarios shown in the DEIS are examples only. The actual flow release for enhancement of anadromous fish would be developed by ODFW. For example, all enhancement flows could be held until fall to provide attraction flows for fall chinook. These enhancement flows would also influence water temperatures. See response #10 to WRD comment on page 12 and response #14 to ODFW comment on page 24.

6. The location of wetlands were identified in the DEIS. There is no drainage system planned or considered for these areas. The intent of this section was to identify that drainage facilities may be necessary in some areas, although there is no drainage actually planned. The County has a minimal reserve fund for providing drainage on those areas where irrigation could exacerbate natural drainage conditions. The draft EIS and final EIS wetland analysis and environmental commitments preclude drainage of existing jurisdictional wetlands. ODFW and USFWS will be consulted as appropriate in the wetlands protective actions.

7. The area included for wildlife management is east of the reservoir to the "take line" (the N-S centerline of Section 28). The lands between the takeline and Romie Howard Road are private property, and were not obtained by Douglas County as previously proposed.

8. Page 2-18. Construction Schedule, 3rd and 4th paragraphs. We recommend that the fisheries and wildlife measures, especially those for mitigation, be implemented concurrently and proportionately with other project features. Accordingly, several of the wildlife mitigation measures should be implemented earlier in the construction phase to coincide with impacts as they occur. The wetlands construction measures at the upper end of the reservoir, as well as the brush piles, debris structures and other structures that would be part of the pool area, should be implemented during the reservoir clearing and road relocation work. Additionally, the downstream riparian fencing, vegetation planting and other restoration work should be implemented within the first 2 years of construction to offset losses that occur to this important habitat. Likewise, the securing of white-tailed deer habitat should also start early in the construction period. The FEIS should reflect these changes in the overall construction schedule.
9. Page 2-24. Table 2-3. Coordination Requirements. The compliance section of this table should identify completion of the Fish and Wildlife Coordination Act Report (August 1990), and the report's recommendations should be incorporated into project planning and implementation.
10. Page 3-2. Construction Activities, 1st paragraph. This list of activities should also include construction and placement of brush piles, large woody debris, or other similar structures for the main pool area and upper pool south of the causeway. In addition, the wetlands excavation work may require berms, dikes, or other embankment activities for creating and maintaining the shallow basins to hold water, and may necessitate riprap or other type of reatment as erosion control methods. These activities should be included in the list.
11. Page 3-35. Return Flows, 1st paragraph. It is stated that return flows would occur as ground water. On page 3-39, the discussion on operation of the project refers to a subsurface drainage system for return flows that would improve ground water quality; elsewhere, it is stated that a subsurface drainage system may be implemented as a future project feature. The FEIS should clarify whether the subsurface drainage system would be a part of the project, and should identify specific conditions for wetlands, ground water, and return flows both with and without a subsurface drainage system.
12. Page 3-61. Mitigation of Impacts to Vegetation, 2nd paragraph. The need to enhance wetlands where possible is identified in the description of wetland conditions on page 10; yet, the DEIS does not identify any wetland enhancement measures. Because the Service strongly recommends enhancing wetlands, we would gladly cooperate with the ODFW and the WRD to identify such opportunities. The wetlands should be restored to their original characteristics of the high value seasonal wetlands scattered throughout the service area, and the restoration effort should be in accordance with the willingness of local landowners and be consistent with the drainage system designs.
13. Page 3-61. Table 3-15-2. Fishery Benefits. As noted in the general comments, there is concern with the level of fishery benefits which are identified for the project, and the ODFW's planning objectives which are being established as part of the Umpqua River Basin Fish Management Plan. The Service is working with the ODFW, National Marine Fisheries Service (NMFS), and the WRD to
8. The mitigation measures will be implemented as feasible during construction activities. The nature and timing of construction conflicts with certain activities, and rather than compromise mitigation, they have been designed as indicated. The downstream riparian work would occur on private property and will be implemented in several phases, including development of a plan that identifies areas needing the most improvement, land owners contact to evaluate feasibility of improvement, cost analysis, determination of funding sources, and implementation. The County will not provide funds from the project for implementation. Planning efforts could be initiated prior to the end of construction (also, see response #22 to ODFW comment on page 26). The securing of habitat for white-tailed deer has already been initiated. The County is presently identifying land parcels in the core habitat area. Implementation of the mitigation plans will be coordinated with ODFW and USFWS. See response #7 to ODFW letter on page 22.
9. The table will be revised as recommended.
10. The list referenced includes only activities associated with the project impact analysis. The mitigation and enhancement activities were not considered as activities that would potentially adversely affect resources, and were, therefore, not included on the list.
11. Section 2.2.2.6 Drainage System on page 2-7 of the DEIS describes the possibility of drainage that would be built as needed. The need for drainage facilities cannot be determined until the project is in operation. It is not possible at this time to say that it would definitely be necessary.
12. The wording should have been "protect" rather than "enhance". This has been corrected in the final EIS. The protection of wetlands in the service area is an environmental commitment. Although restoration of wetlands is not included in the project, the County is willing to consider developing such a program in coordination with ODFW and USFWS.
13. The benefit table has been revised after consultation with ODFW. See response #2. above.

identify acceptable levels of accomplishment for the project that can be presented in the FEIS.

14. Page 3-65, Biological Assessment, 4th paragraph. Concurrence and comment on the biological assessment was provided by the Service on December 12, 1991. Information from this document should be included in the FEIS.
15. Page 3-104, Vegetation, 1st paragraph. This section identifies the loss of 56 acres of "sparse riparian growth" associated with the reservoir pool, but throughout the document it is noted that 173 acres of riparian vegetation would be lost in this area (refer to pages 3-50 & 3-52). This inconsistency should be clarified in the FEIS.
16. Page B-1 through B-9, Environmental Commitments. The Service agrees with the general fish and wildlife mitigation and enhancement features that have been identified here, but believes considerable more detail needs to be developed prior to implementation. Details on design, location, amount, timing, and other considerations should be closely coordinated with the ODFW, NMFS, Service, and the WRD before measures are put into place. We also note that most of the mitigation measures are listed for the operational phase, but believe that several should be considered for implementation during construction, or an earlier phase (see comments on page 2-18 regarding construction schedule). This would be compatible with the goal of mitigating impacts concurrently and proportionally as they occur. Finally, we recommend a detailed monitoring plan as a project feature to track project accomplishments and to fine tune implementation of operations and measures over time. Details of this plan should be closely coordinated with the ODFW, the Service, and NMFS.
17. The short time period of construction and the nature of the construction activities do not lend themselves to early integration of some mitigation measures. To do so may jeopardize the effectiveness of the measures. See response #8 above.
18. A monitoring plan will be developed by Douglas County for each program as appropriate. The plan(s) will be developed in consultation with ODFW, USFWS, and NMFS.

If you have questions about these comments, please direct them to Mr. Merle Richmond, our Regional Environmental Specialist, at 8/429-6150 or to Mr. Ron Garst of our Portland Field Office at 8-429-6179. We appreciate the opportunity to comment on the DEIS.

Man L. Stewart
L. STEWART

cc:
ODFW, Portland
ODFW, Roseburg
NMFS, Portland
EPA, Seattle
Portland Field Office

14. Reference to and a summary of USFW's biological opinion is included in this final EIS.

15. This inconsistency has been corrected in the final EIS.

16. More detailed plans will be developed for mitigation and enhancement for fish and wildlife resources prior to and during early construction. The plans will be developed in consultation primarily with ODFW, USFWS, and NMFS; WRD would be consulted as appropriate. See response #1 above.

17. The short time period of construction and the nature of the construction activities do not lend themselves to early integration of some mitigation measures. To do so may jeopardize the effectiveness of the measures. See response #8 above.

18. A monitoring plan will be developed by Douglas County for each program as appropriate. The plan(s) will be developed in consultation with ODFW, USFWS, and NMFS.

Thank you for your review and comments.



DEPARTMENT OF THE ARMY
 PORTLAND DISTRICT CORPS OF ENGINEERS
 P O BOX 3448
 PORTLAND OREGON 97208-2948

Reply to
 Attention of

February 6, 1992

Planning and Engineering Division

Regional Director
 Bureau of Reclamation
 ATTN: PN-150
 Box 043
 550 West Fort Street
 Boise, ID 83724

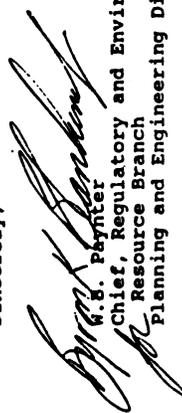
Dear Sir,

Enclosed are the comments of the Portland District, U.S. Army Corps of Engineers on the Draft Environmental Impact Statement (EIS), for the proposed Milltown Hill Project in Douglas County, Oregon. Our review was based on our regulatory responsibilities, and on our functional responsibilities for flood control, hydropower, and navigation.

This project would require a Department of the Army permit under Section 404 of the Clean Water Act. Because of our regulatory jurisdiction, we request that we be included as a cooperating agency for this EIS as provided in CEQ regulations (40 CFR 1501.6).

If there are any questions regarding these comments, please contact Dave Kurkoski, Regulatory and Environmental Resource Branch, at (503) 326-6094 or FIS 423-6094. Thank you for the opportunity to review this Draft EIS.

Sincerely,


 W.S. Prynner
 Chief, Regulatory and Environmental
 Resource Branch
 Planning and Engineering Division

Enclosure

Douglas County has applied for a Corps Section 404 permit and an Oregon Division of State Lands Removal/Fill permit. The permit process will be completed after the FES is filed, a record of decision prepared, and the loan application process is approved. Reclamation will include the Corps of Engineers as a cooperating agency in the final EIS.

Thank you for your review and comment.

U.S. ARMY CORPS OF ENGINEERS
PORTLAND DISTRICT

COMMENTS ON
MILTOWN HILL PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT

1. Our review of this document suggests that a jurisdictional wetlands determination has been accomplished. However, we have not been provided the opportunity to review that determination and therefore cannot comment on its adequacy. For the same reason, we cannot comment on the proposed wetland mitigation described in the DEIS. Ultimately, the adequacy of the wetlands determination and the mitigation proposal must be decided by the Corps of Engineers in the Section 404 permit evaluation process.

Page 2-8 --- middle

2. Paragraph four on this page states that "Some lands not now irrigated would require grading of portions of a field to prevent intermittent surface ponding and aggravation of root-zone excess moisture conditions. Such surface drainage improvements would consist of filling depressions...."

Paragraph five states "No project drainage or change in agricultural practices would occur to negatively affect jurisdictional wetlands."

This combination appears unlikely. From our observations of the project vicinity, areas which would require grading or filling to prevent "intermittent surface ponding and aggravation of root-zone excess moisture conditions" could well be jurisdictional wetlands. If these areas would require drainage to prevent ponding and excess root-zone moisture during the irrigation season, then that same drainage would reduce ponding and excess root-zone moisture during the spring, reducing or eliminating wetland characteristics.

Page 3-8 --- bottom

3. This paragraph states that "The primary problem regarding the suitability of area lands for sustained irrigation is restricted subsurface water movement and inadequate natural drain channels." The paragraph acknowledges that winter and spring rains can delay farm operations in the spring. The paragraph refers to two figures that show "lands that may require drainage facilities," but goes on to state that "Drainage would not affect wetlands." Areas that are wet enough to limit farm operations in the spring could well be jurisdictional wetlands.

1. Douglas County will provide wetlands delineation with documentation with the 404 permit application.

2. There were certain areas in the service area identified in the DEIS as "wetlands". These areas would not be affected. Topography in other unidentified areas that are not jurisdictional wetlands (as determined by the Corps) could result in ponding of water under irrigation conditions because of the natural or man-made contours of the land. It is these areas that were generally mentioned that may require grading or drainage. The statements in the DEIS were meant to identify minimal changes in landscape rather than large changes and were not meant to refer to wetlands. The explanation has been included in the text of the FEIS.

3. See response #2 above.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Office of the Chief Scientist
Washington, D.C. 20230
February 24, 1992

Regional Environmental Officer
U.S. Bureau of Reclamation
Box 043, 550 West Fort Street
Boise, Idaho 83724

Dear Sir:

Enclosed are comments on the Draft Environmental Impact Statement for the Milltown Hill Project, Douglas County, Oregon. Thank you for giving us an opportunity to review the document.

Sincerely,

David Cottingham
(for)

David Cottingham
Director
Ecology and Conservation Office

Enclosure

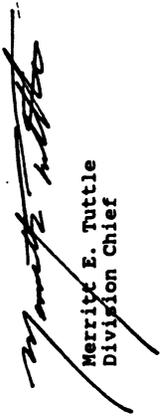


2. It is noted that severe bank erosion that contributes to sedimentation occurs between RM 27 to RM 35. A significant portion of the gravel placement will occur downstream of RM 34.4. Will bank stabilization or other erosion control measures be considered to reduce the amount of sediment? Will a contingency plan be developed to remedy the problems if anticipated anadromous fish benefits are not being achieved? If so, who will bear ultimate responsibility for funding and implementing whatever measures are necessary to provide the projected anadromous fish benefits? These issues should be addressed in the final environmental document.

3. Although we believe that the potential improvements in water quality, water quantity, and habitat in 39 miles of main stem Elk Creek, Yoncalla Creek, and Adams Creek will offset the habitat loss associated with construction of the dam, we are not convinced that the projected anadromous fish populations will be as high as reported in the document. Planning efforts for the Umpqua Basin are underway by Oregon Department of Fish and Wildlife (ODFW) and they have reported that the level of anadromous fish benefits reported in the draft environmental impact statement are not consistent with what they believe can be justified for the Elk Creek system. Since the contingency plan will likely be developed to ensure that projected anadromous fish benefits are achieved, realistic escapement goals should be used for the project.

Thank you for the opportunity to review the Draft Environmental Impact Statement for the Milltown Hill Project. Questions concerning our comments should be directed to Nicholas Iadanza, of my staff, at (503) 230-5428.

Sincerely,



Merritt E. Tuttle
Division Chief

2. The County will undertake a riparian program (as part of the Water Management Plan Goals) to identify the erosion problems, areas affected, and measures necessary to reduce or eliminate erosion on mainstem Elk Creek. The exact location of gravel placement will depend on the magnitude of sedimentation expected and will be decided in consultation with ODFW, USFWS, and NMFS. Also, see response #22 of ODFW letter on page 26.

3. The necessity for contingency plan will depend on the results of monitoring the benefits of the project. Reclamation and Douglas County believe that the project will increase fisheries resources significantly because of the increased flows, cooler water, and habitat restoration. The fishery benefits have been re-analyzed and reduced in consultation with ODFW. If monitoring shows that the anticipated benefits have not occurred, then the County will evaluate the potential reasons in consultation with ODFW, USFWS, and NMFS, and develop management and operation options that could be undertaken to result in anticipated benefits. If additional funding is necessary to implement options funding sources will depend on the reasons identified for unmet goals and the financial ability of the County to support studies.

The fisheries benefits anticipated for the project have been revised in the final EIS and have been coordinated with ODFW.

Thank you for your review and comment.



FEB 27 1992

REPLY TO
ATTN OF: WD-126

Douglas James
U.S. Bureau of Reclamation
Pacific Northwest Region
Box 043, 550 West Fort Street
Boise, Idaho 83724

Dear Mr. James:

The Environmental Protection Agency (EPA) has reviewed the draft Environmental Impact Statement (EIS) for the Milltown Hill Project, Elk Creek Subbasin, Umpqua River Basin in Douglas County, Oregon. Our review was conducted in accordance with the National Environmental Policy Act (NEPA) and our responsibilities under Section 309 of the Clean Air Act.

This draft EIS evaluates two alternatives for providing a reliable source of water for irrigation, industrial development, domestic and municipal water supply, limited flood control, and water quality and fish habitat improvement. The draft EIS evaluates the no action alternative and a proposed 186-foot high dam. The dam would include a 24,142 acre-foot reservoir and a 18.5 mile water pipeline distribution system.

We understand the need to diversify the economy in Douglas County. The potential to improve water quality in Elk Creek and improve aquatic habitat in the process should also be pursued. However, the final EIS needs to thoroughly evaluate and document the potential effects on fish from the fish habitat improvement aspects of the project and water quality effects resulting from secondary growth.

Based on our review, we are rating this draft EIS EC-2 (Environmental Concerns-Insufficient Information). Our environmental concerns are based on the potential for adverse water quality effects resulting from secondary growth and effects on already depleted anadromous fish stocks. Additional information is needed to describe project monitoring, describe the effectiveness of mitigation measures, government to deal with the induced growth resulting from this project. An explanation of the EPA rating system for draft EISs is enclosed for your reference. This rating and a summary of these comments will be published in the Federal Register. Our environmental concerns are discussed in more detail in the enclosed detailed review comments.

Specific responses to EPA's detailed review comments are provided on the following pages.

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We appreciate the opportunity to review and provide comments on this draft EIS. If you have any questions about our comments you may contact Sally Brough in our Environmental Evaluation Branch at (206) 553-4012 or (FTS) 399-4012.

Sincerely,



Ronald A. Lee, Chief
Environmental Evaluation Branch

Enclosures

Thank you for your review and comments.

ENVIRONMENTAL PROTECTION AGENCY
DETAILED REVIEW COMMENTS
MILLTOWN HILL PROJECT

Water Quality

1. The 1988 Oregon Statewide Assessment of Nonpoint Sources of Water Pollution has identified Elk Creek as a stream segment with beneficial use impairment. This report identifies severe and moderate water quality conditions affecting fish, aquatic habitat, and water contact recreation. The draft EIS indicates that the major water quality problems involve elevated temperatures, low dissolved oxygen, suspended sediments, fecal coliform bacteria from septic systems, various trace metals, pH, nutrient levels, and color. The causes of these water quality problems are agriculture (return flows), municipal point sources (sewage effluent), and nonpoint sources (septic tanks and drain field systems).

2. One of the stated purposes of the proposed dam is to provide water storage and distribution for municipal expansion and industrial diversification. Another purpose is to provide irrigation water. The proposed dam will allow and encourage greater municipal, commercial, industrial, and agricultural (irrigation) water use through the year 2030. However, it would appear that the dam could bring about growth in the activities that are currently causing the existing water quality problems. Initially, the stored water that would be released during the low flow periods would improve water quality and fish habitat. Our concern is that the improved water quality will not be maintained over time as the towns in the subbasin grow (sewage effluent), the rural population grows (septic tanks and drain fields), irrigation increases over current levels (return flows), and industrial and commercial diversification occurs.

3. The final EIS needs to provide a quantitative analysis of the effects of secondary/induced growth in agriculture, municipal expansion, industrial and commercial diversification, and general population growth. We concur with the efforts to improve the water quality of Elk Creek and improve fish habitat but the final EIS needs to document that the proposed project will not create similar water quality problems in the future.

Fishery Effects

4. The American Fisheries Society (AFS) has published an article that lists depleted Pacific salmon stocks (Nehlsen et al. 1991). The list includes Umpqua River coho and chum salmon, searun cutthroat trout and Elk Creek coho salmon. The AFS document identifies the Umpqua River coho salmon as a population with a moderate risk of extinction, the Umpqua River chum salmon with a high risk of extinction, the Elk Creek coho with a moderate risk of extinction, and searun cutthroat with a moderate risk of extinction. Decline in Umpqua River native stocks was attributed to "the present or threatened destruction, modification, or curtailment of its habitat or range". (In addition to habitat damage, this category includes mainstem passage and flow problems, and predation during reservoir passage). "In addition, coho salmon were identified as having a high probability of introgression with hatchery stocks." The conclusions in the AFS publication are based on existing data from state and

1. The causes of water quality problems in Elk Creek involve more than agriculture and point and non-point sources. Even without point and non-point sources, water quality would be poor because of the high ambient air temperatures and natural low to no flow conditions in Elk Creek during summer months. Various land use practices have also caused high sediment load. There is no evidence that irrigation return flows have impaired water quality, although sewage effluent has exacerbated the problems caused by high ambient temperatures and low summer flows.

2. Reclamation believes that the major causes of water quality problems are the lack of flows and high ambient temperatures. The flows will be increased considerably over the present summer flows. Increased flows will decrease water temperatures and dilute pollutants. Induced growth in agriculture, municipal population, and industrial diversification will be governed by the amount of project water apportioned for these benefitting entities. See response #3 below.

3. The project will produce water flows that will improve existing water quality (temperature) and water quantity (low flows) problems. Apportioned water uses during the life of the project will prevent the recurrence of existing water problems. See response #2 above. For secondary/indirect effects see #11 below.

4. The ODFW, USFWS, and NMFS have agreed that the project will have net benefits to anadromous fish, such as winter steelhead, coho salmon, and cutthroat trout. The primary benefit is provision of substantially increased flow where flow has been virtually non-existent during summer months. Water that has been available has been in excess of 70°F, but will be substantially cooler under project operation. There are no chum salmon in Elk Creek and they are not known to have used Elk Creek. Substantial habitat improvements will also occur.

Federal agencies with jurisdiction and the findings could have a bearing on the decision evaluated in the final EIS.

We are concerned that all aspects of the proposed action are rigorously evaluated so that the identified stocks in the Umpqua River and Elk Creek are not adversely affected. Based on our review of the draft EIS, we have a number of questions and concerns about the effects of the dam on anadromous and resident fish populations. Additional information is needed to clarify a number of issues.

5. The final EIS should clarify whether the tributaries above the dam are designated as protected areas by the Northwest Power Planning Council for protection of anadromous fish populations. The significance and ramifications of this designation warrants discussion in the final EIS.
6. A detailed description is needed of where spawning and rearing occurs both above the dam and below the dam. How much and what kind of existing habitat is located in the 6.5 miles of mainstem and tributaries above the dam? Below the dam, does spawning occur in the mainstem or in the tributaries? Where is rearing habitat?
7. With regard to the placement of gravel as a mitigation measure, why is there a lack of gravel in the system? Does spawning occur in the mainstem where the gravel will be placed or do the tributaries have the majority of the spawning habitat? The dam will further decrease gravel input into the system, will gravel placement be a long term mitigation measure rather than a one time event?
8. The draft EIS indicates that over 90 percent of total anadromous fish production occurs in the tributaries. Which tributaries will be affected by dam construction? What are the temperature regimes of the tributaries and do the tributaries represent important thermal refuge during the summer and fall?
9. Changes in the flow regime (storing water in late fall, winter, and early spring) could adversely affect juvenile outmigration and adult spawning. The final EIS should present the run times/fish life history for each of the different anadromous species found in Elk Creek and correlate this information with the changes in flow once the dam is built. The cooler water and increased flows would improve rearing habitat on the mainstem of Elk Creek below the dam. Is this where rearing naturally occurs?
10. The draft EIS identifies supplementation of existing populations with juvenile presmolts as a mitigation measure. The AFS article indicates that the declines in coho stocks are partly due to introgression. Hatchery production has been implicated in native population declines through hybridization and introgression (expression of deleterious and lethal genes), competition, disease, and overharvest in mixed stock fisheries. Since the existing native coho stocks are already depleted the population may not be

5. The Northwest Power Planning Council (NPPC) list of protected areas has no bearing on this project. The NPPC is concerned about new hydropower projects. This is not a hydropower project and no storage is allocated for this purpose.
6. More information on spawning and rearing locations have been included in the FEIS. A small percentage (<10%) of the spawning occurs above the damsite based on previous estimates of ODFW. Some rearing occurs above the damsite, but the lack of water and high summer water temperatures cause juvenile fish to move downstream and eventually to the Umpqua River. Most of the spawning for coho and winter steelhead occurs in the tributaries, while the chinook spawn in lower Elk Creek.
7. There is a natural lack of gravels in the system due to existing geological conditions in the area. Some gravels are found at various locations upstream and downstream of the project. Although the dam will decrease gravel input to a minor degree, there are no deposits for a considerable distance below the proposed damsite. Most spawning occurs in the tributary streams below the project. The project would not significantly adversely affect tributary streams, but would benefit the mainstem with the addition of gravel. Gravel placement will be a long-term measure depending on the results of monitoring. Any mitigation planned will be monitored. Plans will also be flexible to take into account results of the monitoring.
8. There are three main tributaries upstream of the damsite. Walker Creek has a barrier at the mouth; Lane Creek and Shingle Mill are the other two. Both have minimal flow (<1 cfs) during summer months. Neither of these tributaries would provide significant thermal refuge.
9. The changes in flow regime will benefit rearing of all species, including resident trout in mainstem Elk Creek. Presently, rearing is low to non-existent due to low flows and high water temperatures which are partially responsible for the low number of fish.
10. Supplementation has been considered for coho and winter steelhead (See: page 3-63 in the DEIS). Fish that return to the base of the dam at Elk Creek would be captured, spawned, and the eggs incubated at a hatchery. These same fry, juveniles, or smolts would be returned to Elk Creek. The details, including feasibility, will be provided in the fisheries mitigation, enhancement, and monitoring report.. See response #42 to ODFW letter on page 29.

large enough to ensure genetic integrity. The final EIS should thoroughly evaluate the effects of hatchery fish on the native Elk Creek stocks.

Indirect Effects

The Council of Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA state that the environmental consequences section of an EIS should include: "Indirect effects and their significance (40 CFR 1502.16(b))." Indirect effects are defined as "...caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." (40 CFR 1508.9(b)). The CEQ regulations also indicate that the EIS should include the "means to mitigate adverse environmental effects." (40 CFR 1502.16(f)) This provision applies to indirect effects as well as direct effects.

The draft EIS states that the economy of the area is not likely to improve without industrial and economic diversity. The biggest barrier to diversity and growth in the study area is the lack of an adequate year-round water supply. One of the stated goals and objectives of this project is to store and supply adequate amounts of water for municipal expansion, industrial diversification, and improved agricultural development. Providing an adequate year-round water supply would contribute to induced residential, commercial, and industrial growth and increase the rate of growth in the study area. By definition these types of changes constitute indirect effects and should be fully evaluated in the EIS. Induced residential, commercial, and industrial growth can adversely affect water quality, wetlands, and other natural resources. Indirect effects and appropriate mitigation measures must be described in the final EIS.

The draft EIS briefly discusses secondary impacts. The secondary impacts are listed and the draft EIS concludes that the secondary impacts will be long term and insignificant. No basis for this conclusion is provided. The final EIS should provide the details of the induced growth/development scenario that was used to determine that the secondary impacts listed on page 3-100 will be insignificant.

How does the EIS reviewer know that the increase in need for public services will be readily absorbed by local and county agencies? Does a mechanism exist for the county to restrict pesticide and herbicide use, rural homesite construction, and mercury mining? Who would be responsible for the needed improvements in the solid waste disposal program when the population increases? How would these solid waste improvements be financed? Once residential, commercial, and industrial development occurs, does the county currently have development plans and building codes that would protect existing wetlands, floodplains, wildlife habitat, and water quality? Do Douglas County, Oregon Department of Fish and Wildlife, National Marine Fisheries Service, and District 15 Watermaster have adequate

11. Indirect effects were addressed in various sections of the DEIS, as appropriate, but were not identified as "indirect effects". FEIS (See: Section 3.1.28 in the FEIS) has been revised to discuss indirect effects.

12. We considered secondary impacts and indirect effects to be synonymous. Indirect impacts were addressed in more detail throughout respective sections of the DEIS. The intent of section 3.1.28 on page 3-100 was to simply list the indirect impacts rather than provide a redundant analysis that was provided throughout the DEIS. This section has been revised.

13. During the process of planning and data gathering, local and county agencies became aware of the probable problems resulting from project-induced impacts to public services. None of these agencies indicated that the possibility may exist that future public service problems could not be properly addressed as they developed. Douglas County has a comprehensive land use plan approved by the Department of Land Conservation and Development. The plan contains environmental overlays to protect resources and identifies the proposed Milltown Hill damsite as a potential water impoundment site. Douglas County would be responsible for budgeting funds to improve and increase services as needed under project development.

Douglas County will be responsible for monitoring the anadromous fish mitigation and enhancement efforts. The water master presently monitors water use, and his office is in the same Douglas County office that is occupied by the County Department (Douglas County Water Resources Survey) responsible for project monitoring. They have established a close working relationship. The FEIS has been revised to reflect these changes. Also, see response #11 above.

funding and staff to support the additional monitoring and coordination needed for the anadromous fishery enhancement portion of the project?

14. One could argue that indirect effects could be dealt with in the future when more specific information is known. However, for this proposal, induced growth could result in reasonably foreseeable adverse effects to surface water quality, habitat, wetlands, and social/economic services. Since the CEO regulations require an analysis of indirect effects the best time to identify these effects is now, when there is better opportunity to prevent or mitigate them.

15. Much of the mitigation for indirect effects is subject to regulation by other agencies/third parties. In this case, those third parties include Douglas County and the three incorporated cities: Eikton, Drain, and Yoncalla. The EIS can serve the function of offering these third parties adequate notice of the expected consequences and the opportunity to plan and implement corrective measures, if needed, in a timely manner.

16. The analysis of indirect effects should not rely solely on compliance with existing comprehensive land use plans. Although comprehensive land use plans are an important component of the analysis of indirect effects, these plans could result in adverse environmental effects. The comprehensive land use planning process does not necessarily evaluate environmental effects. The EIS should present the local land use controls that affect or regulate new development and discuss whether they could mitigate potential adverse environmental effects. If this analysis occurs before the dam is completed, the city and county will be in a better position to effectively plan for future growth and develop mitigation measures for the impacts resulting from induced growth.

Wetlands

Wetlands are significant environmental resources that provide a wide range of important functions and values. They have experienced severe cumulative losses nationally. For these reasons protection of wetlands is a top priority of EPA. Although the draft EIS shows the location of affected wetlands and their aerial extent, the final EIS should also discuss the functions and values of the wetlands and any unique or special features of the affected wetlands. Once the functional importance of the wetlands are defined, the possibilities for mitigation of potential impacts to these functions can be explored. Unique features may be particularly difficult to mitigate. The key is that the functions and values of the wetlands are the concern, not merely "acre-for-acre" mitigation.

17. For those wetland impacts which are unavoidable, we recommend that a detailed compensation plan be developed and included in the final EIS. The compensation plan should include consideration of both direct, indirect, and cumulative effects. It should contain a statement of goals, a monitoring element, long-term management/protection objectives and a contingency plan (a commitment to conduct additional work if required to meet the goals of the plan).

14. See response #11 above.

15. The Milltown Hill project is proposed by Douglas County. The county is working closely with the incorporated cities as well as the unincorporated area to assure proper planning.

16. The Comprehensive Plan for Douglas County has been approved by the State. In Oregon, evaluation of environmental effect is a major consideration for planning purposes. In addition, uncontrolled development is not allowed (see previous response).

17. The 31 acres of wetlands that will be inundated by the reservoir are considered to be of low functional value because of lack of ponding, sparse vegetative growth, and the drying up of the areas by spring or early summer. These do not appear to have any unique features. By contrast, the project will provide considerable more shoreline than now exists and 23 acres of ponds in the south end that will be shown to be of higher quality. As part of the Section 404 permit, Douglas County will prepare a detailed mitigation plan for the impact on wetlands. This plan will be prepared with input from ODFW, USFWS, Corps of Engineers and EPA.

18. EPA would like to be involved in the development of the detailed mitigation plan for the affected wetlands. We suggest that the Bureau of Reclamation meet with the resource agencies, including EPA, to discuss development of a detailed mitigation plan for inclusion in the final EIS. Tom Robertson, our wetlands specialist in the EPA Oregon Operations Office can be contacted at FTS 423-7024 or (503) 326-7024 to coordinate the wetland aspects of this project.

Mitigation

19. A comprehensive discussion of proposed mitigation for direct, indirect and cumulative impacts is required by the Council on Environmental Quality (CEQ) Regulations for implementing the Procedural Provisions of NEPA. The CEQ regulations indicate that an EIS should include the means to mitigate adverse environmental effects (40 CFR 1508.7) as well as disclose the effectiveness of the mitigation measures to minimize adverse effects. Numerous judicial reviews of NEPA cases have supported this need for identifying mitigation measures and discussing their effectiveness.

Mitigation effectiveness is not included in the discussions in the draft EIS. The final EIS needs to provide a quantitative (if possible) or qualitative description of the site specific effectiveness of the mitigation measures presented in the draft EIS.

Monitoring

20. The EIS should include a discussion of monitoring for each resource category, that has been determined to be significant through the scoping process, including fisheries and water quality. A well designed monitoring plan should demonstrate how well the preferred alternative resolves the issues and concerns identified during scoping. The draft EIS does not contain a detailed monitoring plan.

A comprehensive monitoring plan will measure the effectiveness of the mitigation measures to control or minimize potential adverse effects. A detailed monitoring plan is warranted since this is a site specific project level document. The monitoring plan should include types of surveys, location and frequency of sampling, parameters to be monitored, indicator species, budget, procedures for using data or results in plan implementation, and availability of results to interested and affected groups.

21. The final EIS should describe the feedback mechanism which uses the monitoring results to adjust standards and guidelines, best management practices, standard operating procedures, intensity of monitoring, and project administration when adverse effects are first detected. Providing such a process for adjustment will ensure that mitigation will improve in the future and that unforeseen adverse effects are recognized and minimized.

18. The wetland mitigation plan has generally been accepted by ODFW and USFWS. The detailed plan will be coordinated with these agencies and with EPA and the Corps. See previous response.

19. Mitigation has been addressed for all natural resources except forestry (See: Environmental Commitments, Appendix B). The loss of forest land is difficult, if not impossible to mitigate. For other primary resources, such as Columbian white-tailed deer, wetlands, fisheries, and wildlife, Reclamation was able to identify measures to mitigate impacts and to enhance resources. These have been quantified in terms of loss and amount gained or by description of actions that Douglas County will be required to implement as environmental commitments. Most of the discussion concerning mitigation have been occurring for several years among Reclamation, Douglas County, USFWS, NMFS, and ODFW. A mitigation, enhancement, and monitoring plan will be developed by Douglas County in consultation with resource agencies. The plan will be prepared prior to and during early construction. Statements concerning the anticipated effectiveness of the proposed mitigation measures were included in the draft and final EIS.

20. Detailed monitoring plans will be prepared by Douglas County for all pertinent resource categories, including fisheries and water quality. The plans are necessary to evaluate the effectiveness of the project mitigation and enhancement efforts and it will be used to guide decisions in mitigation and enhancement efforts. The monitoring plan will contain various elements some of which are cited by EPA. Preparation and implementation of monitoring plans have been included as environmental commitments in the draft and final EIS. See response #1 to NMFS letters, on page 39.

21. Douglas County views the monitoring plan to be the primary method to evaluate effectiveness of mitigation and enhancement. The unpredictability of natural systems (because we do not know all the variables affecting a given resource) makes it imperative that flexibility be a part of the program. Consequently, for at least the first few years of project operation, there will be a week to week, if not day to day, interaction with the local District Biologist at ODFW. This has been the practice at the County's Galesville Reservoir and has resulted in a good relationship between the County and ODFW.

SUMMARY OF THE EPA RATING SYSTEM
FOR DRAFT ENVIRONMENTAL IMPACT STATEMENTS:
DEFINITIONS AND FOLLOW-UP ACTION *

Environmental Impact of the Action

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA intends to work with the lead agency to reduce these impacts.

EO--Environmental Objections

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective or issues may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEO.

Adequacy of the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 303 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEO.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment

February, 1997