P85-004
PI2006-053.

MWH

JAN 11 2007

January 9, 2007

**Stagecoach Hydroelectric Project, FERC Project No. 9202**
**Application for Amendment of FERC License**

Dear Sir or Madam:

Enclosed is a CD of the Upper Yampa Water Conservancy District (UYWCD) Application for Non-Capacity Related Amendment of Minor Hydropower Project License as filed with the Federal Energy Regulatory Commission (Commission). The transmittal letter to the Commission on the CD provides additional detail on the filing. Should you need a hard copy of the Amendment Application, please contact Mr. Kevin McBride of the UYWCD at 970 879-2424, or via e-mail at upperyampa@mwwater.com.

UYWCD has worked collaboratively with interested parties to resolve issues prior to filing the Amendment Application. Feel free to contact Mr. John Fetcher or Mr. Kevin McBride at the above number if you have any questions on the Application. UYWCD plans to continue to work with resource agencies and the U.S. Army Corps of Engineers on addressing issues as the FERC processing of the application progresses. We thank you for your participation thus far in the process and look forward to working with you in the future.

Sincerely,

Wayne M. Dyok
by Sheryl Bay, Admin. Asst.

Wayne M. Dyok

Enclosure

1801 California Street, Suite 2900
Denver, Colorado
80202

Tel: 303 291 2222
Fax: 303 291 2221

P85-004
PL2006-053

**Mary Alice Page-Allen**

**From:** Wayne.Dyok@tteci.com

**Sent:** Wednesday, August 22, 2007 5:23 PM

**To:** patty_schradergelatt@fws.gov; libbie.miller@state.co.us; andrew.poirot@state.co.us; Mary Alice Page-Allen; prestonc@parks-mx.state.co.us; elvis.iacovetto@state.co.us; erin.light@state.co.us

**Cc:** John Fetcher; kmcbride@mwwater.com

**Subject:** Stagecoach Project - FERC No 9202 - Transmittal of Draft Response to FERC's Information Request

Good Afternoon.

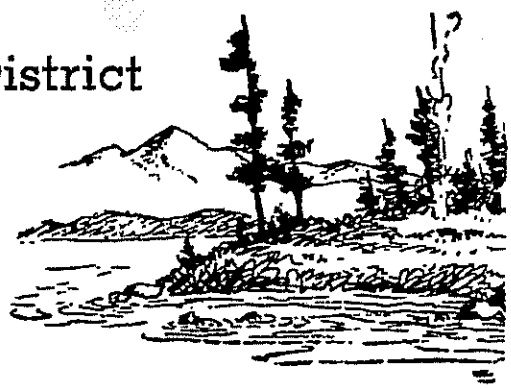
On June 18, 2007 FERC requested that Upper Yampa Water Conservancy District provide additional information on the amendment application for the Stagecoach Project reservoir raise. Those agencies that the District was asked to consult with received a copy of FERC's request from the District on June 22, 2007. (A copy of the FERC request is attached to this e-mail.) Attached is the District's draft response to FERC's information request, including a transmittal letter and two appendices.

The District has expanded the distribution list for its response to include entities that may have an interest in the issues contained in the draft response to FERC, including the Bureau of Indian Affairs, Routt County Government, the US Army Corps of Engineers, the Colorado Historical Society, the Colorado State Engineer, and the US Environmental Protection Agency. (Some of these entities will receive a hard copy of the response, since we do not have e-mail addresses for them.) The District is asking for a response by September 4th to avoid an extension request to FERC. However, in their response schedule, FERC included a 30-day review period. Should you require time beyond September 4th to complete your review please let me, Kevin McBride or John Fetcher know. Should you have any questions, please contact Kevin McBride at 970 879-2424 or via e-mail. Feel free to respond to this e-mail with your responses and copy Kevin, or send your responses directly to Kevin. If you would like to receive a hard copy in the mail please let me know. Also, we would appreciate if you would acknowledge receipt of this e-mail by responding to me.

Thank you very much for your participation on the project.

Regards,
Wayne

# Upper Yampa Water Conservancy District



AUGUST 22, 2007

REVIEWING AGENCIES:

RE: FERC LICENSE 9202-142 COLORADO
STAGECOACH RESERVOIR ENLARGMENT

The Upper Yampa Water Conservancy District has applied for a license amendment with the Federal Energy Regulatory Commission (FERC) to raise the level of Stagecoach Reservoir four feet by raising the Dam's spillway crest. Significant consultation with FERC and other State and Federal agencies has occurred since the initial application and continued since FERC's letter of June 18, 2007 to the Upper Yampa Water Conservancy District (UYWCD) requesting additional information.

The enclosed District's response to FERC's request summarizes the conversations we have had with all of those agencies that have commented on issues about the raise. FERC requested that agencies have a 30 day review period; however, please respond by September 4, 2007 so we may avoid an extension request. We thank each and every representative who has helped us with this matter.

Sincerely,

UPPER YAMPA WATER CONSERVANCY DISTRICT

John R. Fetcher, Secretary/Manager

Encl.

Mailing Address
P.O. Box 880339
Steamboat Springs, CO 80488-0339

Location
Fish Creek Filtration Plant
2310 Clear Water Trail

Telephone
(970) 879-2424
Fax (970) 879-8169

**RESPONSE TO THE LIST OF DEFICIENCIES IN THE APPLICATION TO FERC TO ENLARGE STAGECOACH RESERVOIR**

The Upper Yampa Water Conservancy District (District) has applied for a license amendment to the Federal Energy Regulatory Commission (FERC) to raise the level of the Stagecoach Reservoir by four feet. FERC has responded to the application in their letter to the District dated 18 June together with a list of application deficiencies most which concern two agencies, namely the Colorado Division of Wildlife and U.S. Fish & Wildlife Services.

The District has had a number of meetings with these agencies in order to discuss the impact the enlargement might have within their field of interest (see Appendix B). At the meeting held 12 July, representatives of the following agencies were present:

Bill Atkinson, Colorado Division of Wildlife
Libby Miller, Colorado Division of Wildlife
Patty Gelatt, US Fish & Wildlife Service
Bob Muth, Director of the Endangered Fish Recovery Program
and Tom Pitts, Recovery Program coordinator.

Much of the discussion centered around the possibility of Northern Pike migrating downstream to habitat of the four endangered fish below Craig. Following the discussion, these measures were agreed to:

1) Continue stocking of trout in larger sizes (12 inches plus) too large for pike to ingest. Thus eliminating a source of pike forage.

2) Eliminate pike from Catamount and in the Gold Metal trout fishery and below Catamount through the proposed research program, and evaluate impacts of removal.

3) Work cooperatively to minimize spills, including:

- A meeting of CDOW and Upper Yampa District in January and in early spring of each year regarding status of the reservoir and discussion of opportunities to minimize spills.
- Using the forecast of runoff, manage the reservoir to minimize spills to the extent possible.

Other matters of concern, particularly to Bill Atkinson of the DOW, is the need to keep dissolved oxygen level (DO) to 6 mg/l as near as possible to the stilling basin without having to release water of higher than 16°C. It should be noted that during the hot summer months of July and August highly oxygenated water is in the upper reservoir surface where temperatures are high. Hence, to meet both requirements during that period is difficult. Fortunately, water released below the 6 mg/l standard, say 4 mg/l, is rapidly aerated as water cascades over rocks below the dam. The District has agreed to install an additional rock structure to further shorten the distance where the stream reaches the DO standard of 6 mg/l. The District's permit requires that 6 mg/l must be met at station 2 a

thousand feet downstream; this has not been a problem. We understand that these are the main concerns of these agencies.

**Following is the District's response to deficiencies listed in the FERC 18 June letter.**

**Responses to Schedule A**

Subject: Environmental Report
Comment: The environmental report must be prepared in consultation with the federal and state resource agencies and documentation of this consultation must be included in the report.
Response: The District has been closely coordinating with the respective agencies since the public meeting on 16 August 2006. Since then we have had a number of consultations with the agencies at meetings or via email. A list of meetings and emails are enclosed as Appendix "A". Consultation with the agencies continues and forms a basis for the following responses.

Subject: (i) Existing environmental description, Fish and wildlife resources
(note comments for the remainder of this section have been labeled A to J)
Comment A:
Response: The fish species present at the project are identified in Table E-8 of the application. The District does not have current information on the relative abundance of these species. Mr. Bill Atkinson, DOW fisheries biologist reports that catchable size trout (12 inches plus) are stocked annually in November. It is assumed that this size will not be ingested by pike. He also stated that the reservoir is managed as a Northern Pike fishery because pike fishing attracts many anglers.

Comment B:
Response: The additional 3,185 ac-ft stored in a reservoir resulting from the 4 foot increase in spillway height would have no identified significant impacts to fisheries in the reservoir. Increase in reservoir elevation will inundate some additional vegetation around the reservoir. Low-gradient shorelines areas will be used for wetland mitigation (see 404 permit application). Steeper shoreline areas will undergo an identical transformation that occurred when the reservoir was originally constructed and filled. Habitat around the shoreline will be similar to what it is today after an adjustment period. Total reservoir fluctuation will be only slightly less (in the order of inches) than what occurs under current demand. For example an annual drawdown of eight vertical feet from the proposed maximum reservoir level of 7004 feet (5800 ac feet) will occur in approximately 7.6 feet rather than the current 8 feet from the existing maximum reservoir level of 7000 feet. During periods of drought, depending upon the demand from storage allotees, the reservoir may be drawn down further. Stratification of the reservoir is also expected to occur with the same depth of epilimnion as what occurs currently. These changes are expected to be de-minimus to reservoir fisheries. The District will continue to work with DOW through its fisheries management program. The fishery below the

dam is also managed by Colorado DOW. The primary issue associated with the raise has to do with balancing temperature and DO releases from the reservoir. This water quality issue is responded to in comment H below.

Comment C – G:
Response: The District is removing "shallow shoreline impoundments" and the concept of "closed" wetland mitigation basins from the amendment application. We would not be able to guarantee exact water levels during ice off for such a scheme to function. DOW and FWS representatives understand this and agree to the removal of shallow shoreline impoundments from the application. Hence there are no drawings of the shallow shoreline impoundments; nor is there a description of their operation and maintenance.

Subject: Water Quality & Quantity
Comment H -J:
Response: There is agreement that the only water quality issue below the dam is the balance between temperature and dissolved oxygen (DO) in water released by the multi-stage outlet structure through the power plant turbine. Discussion in the license application of the processes of reservoir stratification, operation of intake tower gates to balance DO and temperature of release water, and reaeration of the water in the cascading stream below the dam are accurate. What is in question is exactly how these processes will interact and can best be managed in the future. It should be noted that the 1986 Environmental Impact Statement for the Stagecoach Reservoir Project on pages 66 and 67 reviews the matter of the relationship of discharge temperature to dissolved oxygen. The EIS recommendation was to release water as cold as possible knowing that with the release of cold water in August, DO levels could be jeopardized. However, it noted that re-aeration would take place rapidly in the dam discharge. During hot days of late July and August it has been difficult at times to maintain cold temperatures (12-16°C) downstream and at the same time provide high levels of dissolved oxygen (above 4 mg/l) in the stilling basin. Our records show that during the critical month of August (2004, 5, 6 & 7) the discharge DO level never dropped below 4.1 mg/l. Aeration below the dam takes place rapidly as the water cascades over rocks. We have checked DO levels below the dam and determined that with 4mg/l DO leaving the stilling basin a level of 6 mg/l is reached well within 1000 feet.

In consultation with the DOW the District has agreed to a number of items concerning DO and its monitoring downstream of Stagecoach Reservoir. When the spillway is raised, the District will install an additional boulder structure within 250 feet below the stilling basin to accelerate aeration of flows. If, after the reservoir raise, it is necessary to meet 6.0 mg/L at the lower station, the District will design and install a structure on the upper gate of the intake tower to raise the invert of the upper gate by four feet. The trout fishery below the stilling basin is exceptional and attracts anglers from miles around. The District wishes to maintain this highly valued fishery.

**We will now refer to Schedule B. Additional Information Request**

RECREATION:

1.) and 2) Stagecoach Reservoir lies entirely within Stagecoach State Park. Therefore only Park recreation facilities would be impacted. The District has reviewed in detail the impact of the raise on recreation facilities with the Colorado Division of Parks, the Districts' lessee of the facilities. Following is their list of facilities that will be affected by the raise. The District is committed to perform necessary work to restore facilities to their present status.

A.) Swim beach – includes rebuild of the beach by excavating the bank adjacent to the current beach. In addition 2 retaining walls will need to be replaced and the picnic patio, which measures 20 foot in diameter, will need to be relocated. Signs will need to be moved out of the area to new locations. Concerns about swim beach slope in same location

B.) Marina Boat Ramp – all but 12" of the existing concrete ramp at the Marina will be inundated. The concrete portion of the ramp will need to be extended further up the paved portion of the incline.

C.) Haybro Day-Use area – approximately 20 trees will need to be replaced of the same type and size. The affected trees can remain in location for potential habitat.

D.) Lot 14 – located off of County Road 14. The vault restroom will be razed, removed, smoothed over and a new vault restroom will be placed in a higher location in this lot. Riprap along shoreline should be placed to avoid erosion issues.

E.) Lot 16 – located off of County Road 16. Very little impact at this lot except for erosion concerns. The lot will need riprap along its edges.

F.) Morrison Creek Boat Ramp – all but 12" of this concrete ramp will be inundated. This ramp sits level with the existing lot. Additional pit run and gravel needs to be placed to raise the existing lot. The vault restroom will be razed, removed, smoothed over and a new vault restroom will be placed in a higher location on this lot. Sections of the Elk Run Trail will be inundated and will need to be relocated, resurfaced or rip rapped.

G.) Little Morrison Creek Bridge Crossing – a new bridge was installed on the Elk Run Trail in this area in 2005. The bridge will be at a water level of 7204'. The bridge can be raised to accommodate the capacity increase. Fifty feet of the trail on either side of this bridge will need to be raised and resurfaced to meet the bridge tread.

H.) Wetlands – the vault restroom will be razed, removed, smoothed over and a new vault restroom will be placed in another location in the park. Sections of trail may be impacted here and the first viewing deck will need to be raised. This project could be a co-op with additional support from the Colorado Division of Wildlife grants and other available grants supporting outdoor recreation.

I.) Handicap Fishing Access – over the course of the years, a handicap fishing access point on the main road into the park near the Keystone Day – Use area has developed. This parking space will be inundated by the level increase. This amenity for the handicap fisherman needs to be replaced in the same area to Federal ADA Standards.

RESPONSES TO SUBJECTS A THRU I.

A.) The swim beach will be raised with imported sand. Should a retaining wall boarding the beach be required, it will be built. The concrete patio will be moved or rebuilt. The beach slope to the water should remain the same.
B.) The marina boat ramp will be extended.
C.) Shore line trees which are small will be replanted uphill.
D.) The vault restroom on Lot 14 will be moved or rebuilt on higher ground. Shore line will be rip-rapped where necessary.
E.) Parking area (Lot 16) may require shore line armoring.
F.) Morrison Creek boat ramp will have to be relocated if extension is not practical. The vault restroom will be moved or rebuilt if necessary. Elk Run Trail may have to be moved up hill.
G.) The Little Morrison Creek Bridge will be raised as well as the trail.
Hl) The vault restroom at the west wetland parking & viewing area may have to be relocated. Trail sections where impacted will be raised.
I.) The handicap fishing access & parking if impacted will be raised to ADA standards.

Details on the relocations, as well as functional design drawings, will be provided to the Commission during the detailed design phase.

VEGETATION AND HABITAT:

3.) Construction of the 4 foot concrete addition to the crest of the spill way will take a relatively short period. The plan is to perform the work after Labor Day, the end of the recreation season. It will require drawing the reservoir down 6 to 8 feet. This draw down should not affect riparian habitat any more that normal operational draw down which takes place every fall.

4.) The nesting leks of the Sharp-tailed Grouse may be impacted. Up hill from their location, vegetation management will be used to create open space for grouse displays. Areas where sagebrush is removed will be replanted with a seed mix approved by the DOW wildlife manager. Apparently current leks exist below the normal high water line. As stated previously new reservoir operation will form identical habitats to what now exists and this should include these leks.

5.) In consultation with the Division of Wildlife, concerns exist over the amount of waterfowl habitat included in the District's Wetland mitigation plan. The District will commit to creating appropriate habitat in the "contingency" area identified on the Northwest side of the Reservoir. This will address issues with waterfowl including the Greater Sandhill Crane.

6.) We anticipate the same mix of habitat types to be present after the reservoir raise. Habitat for the Leopard Frog will not be affected.

FISHERY AND AQUATIC RESOURCES:

7.) The inverts of the intake gates are fixed so that a raise of 4 feet of the reservoir will decrease the effective elevation of each gate. In discussing this matter with the Division of Wildlife, we came to the conclusion that if DO levels are affected, the District will

commit to a boulder reaeration structure below the Dam. If this proves not to be sufficient, the District would commit to an alteration to the top gate to raise its discharge invert 4 feet.

Occasionally, hydrogen sulfide smell is present. This is a function of the DO levels and will be taken care of by the above stated measures for managing DO in releases from the Dam. Our simple solution is to close the bottom gate (the source of the Hydrogen Sulfide) for a period long enough to correct the problem.

8.) We have agreed to meet with DOW & FWS every January to review the predicted snow runoff and its effect on reservoir operations. We have agreed to minimize spills if it is determined that Pike escape over the spillway. Therefore, we are eliminating the "Closed Wetland Basins" from the application for pike mitigation.

9.) The enlargement will no doubt result in an increased discharge at times. However these will be subject to contractual obligations and are not devoted to the downstream fishes. A depletion assessment of 470.2 af has been calculated by Resource Engineering. This number has been agreed to in consultation with USFWS and is covered under the programmatic Biological Opinion. A fee will be paid to the program for this depletion.

Habitat for endangered fish on the Yampa River exists below Craig a distance of some 65 miles below Stagecoach. Calls for water by downstream storage allotees would benefit endangered fish by increasing river flows. For example, Tri State Generation & Transmission, one of our storage customers, calls for a release of a portion of their storage yearly. This release is of benefit to the entire stream.

10.) At the meeting on 12 July with representatives of the Colorado Division of Wildlife, the U.S. Fish & Wildlife Service and a representative of the FWS recovery program (Robert Muth), the issue of Northern Pike preying on the four endangered fish was reviewed. The Service is actively working on a program to eradicate Pike between Steamboat Springs and Craig. The enlargement itself will not increase the potential for Pike escapement. Additionally, as previously stated the District will consult annually in January to minimize spilling of the reservoir, the primary source of pike escapement.

WATER QUALITY:

11.) This matter was discussed above under items H&I in Schedule A. Note that within a distance of 1,000 feet, DO levels are 6 mg/l and higher even though there are times when DO in the stilling basin was 4 mg/l.

12.) The 401 Water Quality Certification application was submitted to the Water Quality Control Division and no issues were raised in their review.

ENGINEERING:

13.) Our consultant now working on the design of the enlargement structure will provide a proper response to concerns raised in this paragraph by 30 September 2007. Our consultant, URS is working with FERC's engineering group and the Colorado State

Engineer's office. No problems have been identified and a design report will be forwarded by September 30.

CONSULTATION:

14.) A list of recipients of the pre-application is herewith included together with responses received as Appendix B. (Note agency responses will also be included in the submittal to FERC.)

15.) We will provide documentation of the waivers of compliance.

16.) We will copy FERC with information requested by resource agencies.

17.) This will certify that the District has sent copies of the final application to the following agencies:

Colorado Division of Wildlife
US Fish & Wildlife Service
Colorado Department of Health and Environment
Bureau of Indian Affairs
Routt County Government
Army Corp of Engineers
Colorado Historical Society
Colorado State Engineer
Environmental Protection Agency (EPA)

The complexities of managing water resources, sport fisheries and protecting endangered fish will require significant coordination and adaptive management among the agencies involved. The District believes this consultation is an important first step towards meeting our multiple objectives. However, ongoing consultation will also promote the sharing of information regarding research being conducted by the Recovery Program and the DOW, along with the hydrology data collected by the District.

**Appendix A**
**Meetings and E-mails re: Stagecoach Raise**

Meetings were held with DOW and as available USFWS and the Endangered Fish Recovery Program on the following Dates. A list of E-mail correspondence is also included.

Meetings

Friday, February 23, 2007 – additional scoping on issues of stagecoach raise
Thursday, March 22, 2007 – additional discussions regarding the D.O. issues
Thursday, July 12, 2007 – discussions centered on pike issues

| From | Subject | Received | Size |
|---|---|---|---|
| **Date: Older** | | | |
| Miller, Libbie | Meeting date to discuss Stagecoach expansion | Thu 1/18/2007 11:... | 13 KB |
| Miller, Libbie | RE: Meeting date to discuss Stagecoach expansion | Thu 1/18/2007 12:... | 20 KB |
| Atkinson, Bill | RE: Meeting date to discuss Stagecoach expansion | Thu 1/18/2007 6:3... | 20 KB |
| Patty_Schrader... | Re: | Tue 3/20/2007 8:0... | 12 KB |
| Patty_Schrader... | RE: | Wed 3/21/2007 11... | 15 KB |
| Atkinson, Bill | RE: Meeting date to discuss Stagecoach expansion | Thu 4/26/2007 5:2... | 22 KB |
| Atkinson, Bill | RE: Meeting date to discuss Stagecoach expansion | Thu 4/26/2007 6:5... | 31 KB |
| Miller, Libbie | Got your message... | Thu 5/3/2007 8:14... | 10 KB |
| Patty_Schrader... | RE: | Tue 5/22/2007 8:0... | 97 KB |
| Tom Pitts | FW: Question for Kevin McBride | Wed 5/30/2007 8:... | 14 KB |
| Miller, Libbie | RE: Stagecoach Project - FERC Project 9202 - Transmittal of FERC Letter of May 21, 20... | Fri 6/8/2007 7:49 AM | 19 KB |
| Tom Pitts | Bob Muth email | Fri 6/8/2007 3:13 PM | 10 KB |
| Tom Pitts | Patty Gelatt's email address | Fri 6/8/2007 3:14 PM | 10 KB |
| Atkinson, Bill | RE: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Mon 6/11/2007 7:5... | 15 KB |
| Miller, Libbie | RE: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Mon 6/11/2007 8:5... | 19 KB |
| Patty_Schrader... | Re: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Tue 6/12/2007 8:0... | 14 KB |
| Tom Pitts | Atkinson: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Tue 6/12/2007 8:3... | 19 KB |
| Patty_Schrader... | RE: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Tue 6/12/2007 9:0... | 17 KB |
| Atkinson, Bill | RE: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Tue 6/12/2007 1:0... | 15 KB |
| Atkinson, Bill | RE: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Tue 6/12/2007 2:2... | 26 KB |
| Atkinson, Bill | RE: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Fri 6/15/2007 7:09... | 32 KB |
| Miller, Libbie | RE: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Sat 6/16/2007 10:... | 35 KB |
| Tom Pitts | Stagecoach Meeting | Mon 6/18/2007 3:5... | 10 KB |
| Patty_Schrader... | RE: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Wed 6/20/2007 11... | 7 KB |
| Tom Pitts | Stagecoach DOW studies | Thu 6/21/2007 1:5... | 10 KB |
| Atkinson, Bill | RE: July 12 meeting Stagecoach Reservoir Raise and Pike Issues | Sun 6/24/2007 8:4... | 40 KB |
| Miller, Libbie | RE: Stagecoach Project - FERC Project 9202 - Transmittal of FERC Letter of June 18, 2... | Mon 6/25/2007 8:1... | 27 KB |
| Tom Pitts | Atkinson | Fri 6/29/2007 4:03... | 10 KB |
| **Date: Last Month** | | | |
| Tom Pitts | Stagecoach FERC Application re: NP Shoreline Impoundments | Sun 7/1/2007 11:5... | 76 KB |
| Tom Pitts | ESA Section 7 consultations: Yampa basin | Thu 7/5/2007 3:38... | 50 KB |
| Tom Pitts | location... | Mon 7/9/2007 6:37... | 10 KB |
| Miller, Libbie | Stagecoach expansion project | Thu 7/19/2007 9:5... | 12 KB |
| **Date: Three Weeks Ago** | | | |
| Tom Pitts | Final July 12 Meeting Summary | Wed 8/1/2007 2:1... | 72 KB |
| Tom Pitts | Final July 12 Meeting Summary | Wed 8/1/2007 2:1... | 72 KB |
| **Date: Last Week** | | | |
| Tom Pitts | Letter to DOW | Wed 8/15/2007 4:... | 10 KB |
| Tom Pitts | RE: Letter to DOW | Fri 8/17/2007 12:2... | 18 KB |

## APPENDIX B

## STAGECOACH HYDROPOWER PROJECT
## AMENDMENT APPLICATION
## DISTRIBUTION

Ms. Magalie R. Salas, Secretary (original plus 8 copies)
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

San Francisco Regional Office
Federal Energy Regulatory Commission
901 Market Street, Suite 350
San Francisco, CA 94103

Mr. William Guey Lee
Project Compliance and Administration
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Mr. Neil B. Cloud, NAGPRA Representative
Southern Ute Tribe
POB 737
Ignacio, CO 81137

Ms. Betsy Chapoose, NAGPRA Representative
Ute Tribe of the Uintah and Ouray Reservation
P.O. Box 190
Ft. Duchesne, UT 84026

Mr. Terry Knight, Sr., NAGPRA Representative
Ute Mountain Ute Tribe
POB 468
Towaoc, CO 81334

Mr. Richard Brennan, Chairman
Northern Arapaho Business Council
Northern Arapaho Tribe
POB 396
Fort Washakie, WY 82514

Mr. William C'Hair
Language and Cultural Committee
Northern Arapaho Tribe
POB 9184
Arapaho, WY 82510

Ms. Jo Ann White, Director
Northern Arapaho Tribal Historic Preservation Officer
P.O. Box 396
Ft. Washakie, WY 82514

Mr. Eugene Little Coyote, Chairman
Northern Cheyenne Tribal Council
P.O. Box 128
Lame Deer, MT 59043

Mr. Gilbert Brady
Northern Cheyenne Cultural Commission
P.O. Box 155
Lame Deer, MT 59043

Mr. Conrad Fisher, Tribal Historic Preservation Officer
Northern Cheyenne Tribal Historic Preservation Office
POB 128
Lame Deer, Montana 59043

Mr. Darrell Flying-Man, Chairman
Cheyenne & Arapaho Business Committee
Southern Cheyenne and Southern Arapaho Tribes
POB 38
Concho, OK 73022

Mr. Ivan Posey, Chairman
Shoshone Business Council
Eastern Shoshone Tribe
POB 538
Fort Washakie, WY 82514

Ms. Delphine Clair
Shoshone Cultural Committee
Eastern Shoshone Tribe
POB 171
Ft. Washakie, WY 82514

Haman Wise
Shoshone Cultural Committee
Eastern Shoshone Tribe
POB 766
Ft. Washakie, WY 82514

Mr. Ken Jacobson
Chief, Colorado/Gunnison Basin Regulatory Office
U.S. Army Corps of Engineers
402 Rood Avenue, Room #142

Grand Junction, CO 81501-2513

U.S. Bureau of Reclamation
Regional Office
PO Box 25007
Denver Federal Center
Denver, CO 80225-0007

U.S. Bureau of Reclamation
125 S State St.
Rm 6107
Salt Lake City, UT 84138-1147

U.S. Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625

Mr. Pat Nelson
U.S. Fish and Wildlife Service
Ecological Services
Colorado Field Office
PO Box 25486, DFC (MS 65412)
Lakewood, CO 80228-1807

National Park Service
Regional Office
PO Box 25287
Denver, CO 80225

U.S. Environmental Protection Agency
999 18th St
Suite 200
Denver CO 80202

Regional Director
U.S. Bureau of Indian Affairs
Southwest Regional Office
PO Box 26567
Albuquerque, NM 87125

Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Mr. Andrew Poirot
CO Dept. of Public Health and Environment
Division of Water Quality

410 South Lincoln Avenue
Steamboat Springs, CO 80487

CO Department of Public Health and Environment
Water Quality Control Division
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Ms. Erin Light
Division Engineer, Region 6
Colorado Division of Water Resources
PO Box 773450
Steamboat Springs, CO 80477-3450

Colorado Water Conservation Board
1313 Sherman St.
Room 721
Denver, CO 80203

Ms. Susan Werner
Area Wildlife Manager
Colorado Division of Wildlife
Steamboat Springs Service Center
925 Weiss Drive
Steamboat Springs, CO 80487

Colorado Department of Natural Resources, Division of Wildlife
6060 Broadway
Denver, CO 80216

Mr. Michael Taylor
Superintendent
Stagecoach State Park
P.O. Box 98
Oak Creek, CO 80467

Ms. Georgianna Contiguglia, State Historic Preservation Officer
Colorado Historical Society
Office of Archaeology, Review and Compliance Division
1300 Broadway
Denver, CO 80203

Routt County Dept. of Environ. Health
PO Box 770087
Steamboat Springs, CO 80477

Ms. Caryn Fox
Planning Director

Routt County Planning Department
PO Box 773749
Steamboat Springs, CO 80477-3049

Mayor Bruce Pitts
Town of Yampa
56 Lincoln St.
P.O. Box 224
Yampa, CO 80483

Mr. Thomas R. Sharp, Chairman
Yampa-White River Basin Roundtable
P.O. Box 774968
Steamboat Springs, CO 80477

Friends of the Yampa
c/o Peter Vandercar
PO Box 774703
Steamboat Springs, CO 80477

Yampa Valley Fly Fishers
PO Box 774663
Steamboat Springs, CO 80477

Colorado Environmental Coalition
1536 Wynkoop St. #5C
Denver, CO 80202

Stagecoach Property Owners Association
PO Box 774845
Steamboat Springs, CO 80477

Mr. John Fetcher
Secretary
Upper Yampa Water Conservancy District
3310 Clearwater Trail
Steamboat Springs, CO 80488-0339

Mr. Greg Glunz
URS Corporation
8181 E. Tufts Avenue
Denver, CO 80237

Mr. Kent Croffs
IME
PO Box 270
Yampa, CO 80483

Mr. Dan Johnson
MWH Americas
1801 California Street, Suite 2900
Denver, CO 80202

Mr. Wayne Dyok
MWH Americas
3321 Power Inn Road, Suite 300
Sacramento, CA 95826-3889

Via e-mail
John R. Blair
Colorado Department of Water Resources – Dam Safety

Patty Gelatt
U.S. Fish and Wildlife Service

Elvis Iacovetto
CO Division of Water Resources

Libbie Miller
CO Division of Wildlife

Doug Monger
Routt County

May Alice Page-Allen
Routt County Planning

Jean Ray
CO Division of Water Resources

Kris Wahlers
Colorado State Parks – Stagecoach

Steve Colby
Morrison Creek District

Alexis DeLaCruz
Steamboat Pilot and Today

Arlene Porteus
Yampa Town Board

Mike Ratliff

Janet Ray
Yampa Town Clerk

Tom Yackey
Yampa Resident

FEDERAL ENERGY REGULATORY COMMISSION
Washington, DC 20426

OFFICE OF ENERGY PROJECTS

Project No. 9202-142 – Colorado
Stagecoach Hydroelectric Project
Upper Yampa Water Conservation District

June 18, 2007

Mr. John R. Fetcher, Secretary
Upper Yampa Water Conservation District
P.O. Box 0339
Steamboat Springs, CO 80488-0339

Subject: Deficiency of Application for Amendment of License and Additional Information Request (Revised)

Dear Mr. Fetcher:

On May 21, 2007, the Federal Energy Regulatory Commission's (Commission) Office of Energy Projects issued a letter asking you to correct deficiencies and file additional information for your license amendment application for the Stagecoach Hydroelectric Project, filed on January 10, 2007. This letter serves to revise and clarify the list of deficiencies and the additional information request contained in the May 21, 2007 letter. As such, this letter supercedes the May 21, 2007 letter and should be used to prepare your response for filing with the Commission.

Your January 10, 2007 application for amendment of the license for the Stagecoach Hydroelectric Project fails to conform to the requirements of Commission regulations. A revised list of deficiencies is enclosed as Schedule A. Under section 4.32(e)(1) of the regulations, please correct the deficiencies and file your response within 90 days of the date of this letter.

We also need additional information before we can complete our evaluation of your license amendment application for this project. A revised list of the additional information needed is enclosed as Schedule B. Under section 4.32(g) of the Commission's regulations, please file within 90 days of the date of this letter, the information requested in Schedule B.

Please note that, pursuant to section 4.32(g), failure to correct the deficiencies in your license amendment application and provide the additional information we request within 90 days may result in dismissal of your application.

If the correction of any deficiency or provision of additional information causes other parts of the application to be inaccurate, that part also must be revised and refiled by the due date.

In some items, we ask you to consult with various entities and to provide both agency comments and your response to those comments. Within 5 days of your receipt of this letter, you should provide a copy of this letter and the enclosed schedules to all agencies with which we ask you to consult. Then, when you complete your response, make a written request to the agencies for comment. Allow the agencies at least 30 days to respond before filing, and include copies of all agency comments and recommendations, as well as how you addressed them. If the agencies do not reply, you should provide us dated copies of your request for comments.

When you file the requested information with the Commission, you must provide a complete copy of the information to each agency consulted under section 4.38 of the regulations.

Please file an original and eight copies of the information with: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426. Please put the docket number, P-9202-142, on the first page of your response.

Thank you for your cooperation. If you have any questions regarding the Fishery and Aquatic Resources and Water Quality sections in Schedules A and B, please contact Monica Maynard at (202)502-6013. If you have any other questions concerning this letter, please contact Linda Stewart at (202)502-6680.

Sincerely,

Mohamad Fayyad
Engineering Team Lead
Division of Hydropower Administration
And Compliance

Enclosures: Schedule A
Schedule B

cc: Mr. Wayne M. Dyok
MWH Americas, Inc.
3321 Power Inn Road, Suite 300
Sacramento, CA 95826-3889

## Schedule A
## APPLICATION DEFICIENCIES

### AMENDMENT OF LICENSE EXHIBIT E REGULATIONS (18 CFR §4.61) AND THREE-STAGE CONSULTATION REQUIREMENTS (18 CFR §4.38)

| SUBJECT | DEFICIENT | COMMENTS |
|---|---|---|
| **§4.61(d)(2) Exhibit E – Environmental Report** | X | The environmental report must be prepared in consultation with the federal and state resource agencies, and documentation of this consultation must be included in the report. |
| (i) Existing environment description | | |
| Vegetative cover | | |
| Fish and wildlife resources | X | You must include in your description information regarding the fish species present at the project and their relative abundance.<br><br>Your application must include a description of anticipated impacts of the proposed amendment to fish resources, and of measures you plan for the protection and enhancement of fish resources.<br><br>You did not provide a map showing the location of the proposed shallow shoreline impoundments to collect spawning northern pike, and did not provide drawings showing the design of the proposed impoundments.<br><br>You did not provide functional design drawings of the proposed shallow shoreline impoundments.<br><br>You did not provide a plan to construct and operate the proposed shallow shoreline impoundments.<br><br>You did not provide a description of operation and maintenance of the proposed shallow shoreline impoundments.<br><br>You did not discuss how construction and operation of these proposed shallow water impoundments might affect other fish species in the reservoir. |
| Water quality and quantity | X | Because water quality downstream from the project dam is of concern, the description of existing water quality must include the river below the dam.<br><br>Your description of continuing and proposed measures to protect and improve water quality is brief, vague and inadequate. This information must be expanded to describe measures to protect or improve water quality.<br><br>The description of the effects of project operation on water quality and the incremental impact on water quality of the proposed amendment is lacking. The discussion of |

| SUBJECT | DEFICIENT | COMMENTS |
|---|---|---|
| | | impacts resulting from the proposed amendment should be completed and updated in consultation with the appropriate agencies. |
| Land and water uses | | |
| Recreational uses | | |
| Historical and archeological resources (sites included in or eligible for National Register) | | |
| Scenic and aesthetic resources | | |
| Endangered or threatened species, critical habitats | | |

**Schedule B**
**ADDITIONAL INFORMATION REQUEST**

Recreation

1. You only include a description of environmental impacts and mitigation measures to the recreational facilities at the Stagecoach State Park. However, an explanation of how other recreation facilities will be impacted, such as existing marinas or boat docks, is not included. Please provide a description for how each recreational facility and associated signage will be impacted, as well as how it will be moved or re-located (if necessary). In addition, the brief general section (Section 2.7.2) should be expanded to include a more detailed description and functional design drawings of, along with a schedule for constructing and operating, all mitigated measures for all recreational facilities. Please also include an analysis of how these facilities will remain part of the approved as-built drawings pursuant to Article 403[1] of the project license.

2. Mitigation measures include excavating the bank adjacent to the beach and importing sand at the Stagecoach State Park. Please describe where the excavation will take place exactly, and provide a drawing of the location of the excavation, as well as the amount of material excavated. In addition, you state that you plan to relocate a 20-foot-diameter concrete pad near the beach. It is not clear if vegetation will be altered along the shoreline for this relocation. Please describe the measures to be taken, if any, to ensure any necessary vegetation is replanted.

Vegetation and Habitat

3. Your application does not describe the specific best management practices you plan to use to reduce impacts to riparian habitat during construction (Section 2.4.3.1). Please expand upon this section, and describe the best management practices that will be implemented to mitigate for impacts to riparian habitat during construction.

4. You report in your application that minimal impact will occur because the water levels of the reservoir in most years do not fill in the spring until after the typical breeding period for Sharp-tailed Grouse (section 2.4.2.1). You do not describe, however, where potential or historical nesting locations exist for the leks described in the Exhibit E. Please describe where nesting habitat occurs relative to the existing leks and if any additional mitigation measures are necessary.

---

[1] 54 FERC ¶ 62,189, Order Approving in Part As-Built Drawings, issued March 22, 1991.

5. Your application states that anticipated impacts to the Greater Sandhill Crane foraging habitat would be mitigated for by using best management practices (Section 2.5.2.2), but it does not explain what those best management practices will entail. Please expand upon this section, and describe the best management practices that will be implemented to mitigate for impacts to Greater Sandhill Crane foraging habitat during construction.

6. Your application states that anticipated impacts to the northern leopard frog habitat would be mitigated for by using best management practices (Section 2.5.2.3), but it does not explain what those best management practices will entail. Please expand upon this section, and describe the best management practices that will be implemented to mitigate for impacts to northern leopard frog habitat during construction.

Fishery and Aquatic Resources

7. Your proposal would raise the dam crest, but not the release points, by four feet. This effective increased depth of the release points may result in water with a lower DO content and excessive hydrogen sulfide being released after the proposed dam modification. The Colorado Department of Wildlife (CDOW) letter dated November 5, 2006, noted that DO levels below the dam have been a major concern in the past, especially when combined with high water temperatures. The apparent dismissal of the CDOW's concern regarding downstream DO concentrations is insufficient to address this issue (Section 4.1.1). You did not discuss the presence of hydrogen sulfide in the deeper water of the reservoir and its effects on the quality of project releases. Please provide a description of expected changes to water quality of the releases, and a discussion of the possible and proposed mitigative actions to raise DO concentrations and manage the presence of hydrogen sulfide.

8. Your proposed creation of closed wetland mitigation basins along the new shoreline would allow northern pike to enter for spawning during high water, but prevent the pike from leaving once they have spawned. Your application proposes that "if areas are unsuccessful, contingency plans will be implemented," but it does not identify the referenced contingency plans. You state that the CDOW's northern pike management practices, along with trapping pike in the wetland basins, are the best solutions to the pike management problem. This brief general section (4.2.2.1) should be expanded to include a more detailed description and a schedule for constructing and operating the proposed wetland mitigation basins along the new shoreline that would allow northern pike to enter for spawning during high water, but prevent the pike from leaving once they have spawned.

9. Section 4 of application Exhibit E makes no mention of possible changes to outflow volume, release schedules, or benefits from release of the additional stored water that might accrue to downstream fisheries, including the four downstream threatened and endangered species. The CDOW recommended that you adhere to the minimum seasonal flow recommendations that have been established by the Upper Colorado River Endangered Fish Recovery Program, and expressed concern that water depletion might adversely affect downstream threatened and endangered species. You suggest that the increased reservoir storage would benefit fish in the vicinity of the project, especially the threatened and endangered species, but you did not support this conjecture. You did not specify or address any changes in downstream flows that might occur following the proposed dam modification. Please provide a description of foreseeable changes to the release patterns and volumes under the proposed amendment, and a discussion of the possible resulting effects on the downstream fisheries, including possible effects to the threatened and endangered species present in the river downstream from the project.

10. In its October 18, 2006 letter, the U.S. Fish and Wildlife Service (FWS) offered comments on your proposal and the issues identified at the August 16, 2006 consultation meeting. FWS stated that its greatest concern at the Stagecoach Project is the escapement of northern pike from the project reservoir. The agency noted that documentation exists that northern pike escape from reservoirs in the Yampa River basin, and travel downstream into designated critical habitat of the endangered Colorado pikeminnow, razorback sucker, humpback chub, and bonytail. Northern pike are known to prey upon and compete with the endangered fishes. Please respond to these concerns, and conduct informal consultation with the FWS regarding the effects of escaped northern pike on the downstream endangered fishes. In your informal consultation with the FWS, please include preparation of a draft biological assessment. Please also file the draft biological assessment with the Commission. Our letter to the FWS, dated August 1, 2006, designated you as our non-federal representative for the purpose of conducting informal consultation with the FWS.

Water Quality

11. Your application does not provide sufficient information regarding water quality. The table presenting 1992 reservoir water temperature and dissolved oxygen levels is outdated and inadequate as a water quality description. Further, the agencies cited water quality downstream from the project dam as of greater concern. The description of existing water quality in the reservoir should be based on recent data, not 15-year-old data, and should include the river below the dam.

12. You state your intention to apply for a water quality certificate (WQC) in your application, but you have not provided documentation that you have done so. Further, the agency which would issue the WQC, the Water Quality Control Division, Colorado Department of Public Health and the Environment (CDPHE), did not participate in the August 16, 2006 agency meeting. Because your filings have not contained a list of the recipients, it is unknown whether or not you provided information regarding the proposed amendment to this agency. Please consult with the CDPHE regarding the WQC.

Engineering

13. Section 4.61(e) of the Commission's regulations requires you to provide a Supporting Design Report, including suitability of site conditions, geology and lab test reports, identification of borrow areas and quarry sites and an estimate of materials needed, and stability and stress analyses for all major structures and critical abutment slopes under all probable loading conditions. Your application does not include the Supporting Design Report. Please provide two copies of this report. If the report contains preliminary design drawings, please designate the report as a Preliminary Supporting Design Report.

Consultation

14. Your application states that you provided a pre-application document to the Commission, resource agencies, Indian tribes, interested citizens groups, and interested members of the public on July 17, 2006. You filed the pre-application document with the Commission; however, you did not include a list of recipients that received the pre-application proposal or documentation that you provided the information to these parties. Please file a list of recipients of the pre-application document.

15. Your application states that you did not distribute a draft application for review. You requested a waiver of the draft application consultation requirements; however, no documentation of resource agency or Indian tribe waiver of consultation requirements was included in the application. Please provide documentation of the waiver of compliance with consultation requirements from the resource agencies and Indian tribes.

16. The application does not provide evidence that the requested information was obtained and provided, and consultation undertaken and completed with the resource agencies beyond the meeting held on August 16, 2006. Please provide evidence of the information requested by resource agencies being obtained, and documentation of consultation with the resource agencies being undertaken and completed.

17. The application does not contain certification that a copy of the final application was mailed to the resource agencies, Indian tribes, and other interested parties. Please file certification that a copy of the final application was sent to these entities.

## Mary Alice Page-Allen

**From:** Mary Alice Page-Allen

**Sent:** Wednesday, September 27, 2006 12:44 PM

**To:** 'Wayne M Dyok'

**Subject:** RE: Stagecoach Reservoir License Amendment - Transmittal of Letter, Minutes, and Issue Resolution

I only have two very small typos in the Agency & Public Draft Minutes. Page 4, Agency Minutes; Last line, Public Minutes. Redlines attached.

Mary Alice Page-Allen
Staff Planner

-----Original Message-----
**From:** Wayne M Dyok [mailto:Wayne.M.Dyok@us.mwhglobal.com]
**Sent:** Wednesday, September 20, 2006 5:22 PM
**To:** j.blair@state.co.us; kent@imeyampa.com; Jeffrey_Dawson@URSCorp.com; upperyampa@mwwater.com; John Fetcher; patty_schradergelatt@fws.gov; elvis.iacovetto@state.co.us; Daniel L Johnson; erin.light@state.co.us; Kathryn D Miller; libbie.miller@state.co.us; Doug Monger; Mary Alice Page-Allen; andrew.pirot@state.co.us; jean.ray@state.co.us; john.redmond@mwhglobal.com; kris.wahlers@state.co.us; scolby@mwwater.org; adelacruz@steamboatpilot.com; porteus@springsips.com; dandmratliff@springsips.com; jray@townofyampa.com; teyackey@yahoo.com
**Subject:** Stagecoach Reservoir License Amendment - Transmittal of Letter, Minutes, and Issue Resolution

Good afternoon everyone. First, on behalf of Upper Yampa Water Conservancy District, let me thank you again for your participation in the August 16, 2006 joint meetings on the Stagecoach Project Reservoir Capacity Increase. Over the past month we have prepared draft notes of the meetings, developed the list of issues and conducted a preliminary analysis of these issues. Mr. Fetcher has asked me to distribute the following documents to you that relate to the Stagecoach Project (FERC NO. 9202) License Amendment process.

1. Transmittal letter
2. August 16, 2006 Resource agency/local government meeting draft minutes
3. August 16, 2006 Public meeting draft minutes
4. Issue Resolution Document

We ask that you review these documents and provide any comments that you might have to Mr. Fetcher by the October 15, 2006 comment response date. If you have any questions please call either Mr. Fetcher at (970) 879-2424 or me at the number below.

For your convenience, we have provided MS Word versions of the agency meeting notes, public meeting notes, and issue resolution document. If we have misrepresented your comments, please help us correct the minutes. Feel free to make edits using redline strikeout on the meeting notes or issue resolution document. We will finalize and redistribute the meeting minutes after we have received your comments.

FYI, we will be sending hard copies of these documents to the meeting attendees only if they did not provide e-mail addresses. If you need hard copies sent to you, please respond to this e-mail. Also if you know of other parties that may have an interest in the project, please forward their contact information to me so that we may add their names to our database.

Regards,
Wayne Dyok

Wayne M. Dyok
MWH Americas, Inc.
wayne.m.dyok@mwhglobal.com
(916) 418-8252
3321 Power Inn Road, Suite 300
Sacramento, CA 95826

**ATTACHMENT 1**
**Stagecoach Hydropower Project (P-9202)**
**Reservoir Capacity Increase**
**Resolution of Issues Identified at August 16, 2006 Joint Meetings**

On August 16, 2006, Upper Yampa Water Conservancy District (District) hosted Joint meetings on the proposed Stagecoach spillway and reservoir capacity increase. Participants included State and Federal resource agencies, local governments, and the public. The participants discussed several potential issues during the meetings (Table 1). The District has attempted to evaluate the identified issues, or is in the process of doing so. This document presents the District's analysis, or the approach the District is proposing to evaluate the respective issues.

**Table 1 – Identified Issues**

1. Dissolved oxygen effects in reservoir and downstream Yampa River
2. Water temperature
3. Potential increase of algae in reservoir
4. Potential contamination from vault toilets
5. Impact on frazil ice and downstream fog
6. Escapement of northern pike from reservoir
7. Increase in northern pike spawning habitat
8. Effect on ice fishing and spring fishing with ice-off condition
9. Water depletion impact on T&E species
10. Wetland impacts and associated mitigation
11. Impact to sharp-tail grouse habitat
12. Recreation resources affected and mitigation
13. Effect on float fishing
14. Potential flooding of county road
15. Requirement for floodplain development permit
16. County PUD Amendment
17. Effects on shoreline erosion

**1. Effect of Reservoir Water Level Increase on Dissolved Oxygen in Stagecoach Reservoir and downstream Yampa River**

Dissolved oxygen has been studied extensively at the Stagecoach project. On page 67 of the Bureau of Reclamation's Environmental Impact Statement it states:
"Releases from the Stagecoach Dam could periodically have dissolved oxygen levels below the State standard of 6.0 mg/l, but a stream environment similar to that found below the dam will typically re-aerate from 0 to 6.0 mg/l in ½ to ¾ mile downstream. The fish in the river would temporarily leave the immediate area below the dam, but the fish kills would not occur. A periodic release from the Stagecoach Dam of water low in dissolved oxygen could actually be a benefit to the reservoir fishery, but would have minimal impact on the downstream fishery."

The District attempts to meet optimum temperature ranges for the downstream sport fishery during the summer. Consequently cooler bottom water deficient in oxygen is released. Because this could result in a violation of the dissolved oxygen standard in the stilling basin, the FERC revised the dissolved oxygen (DO) requirements stating that the District would maintain a DO standard of 6 mg/l at the USGS gauging station 1,000 feet downstream.

The District has extensive historic records on DO that indicate that DO recovers rapidly with distance downstream as predicted by the Bureau. This information will be summarized in the amendment application. Therefore, re-aeration below the dam will remain effective in meeting the State standard of 6 mg/l 1,000 feet downstream with the 4-foot reservoir increase.

The effect on the DO discharged from the powerhouse will be demonstrated in the license amendment by assuming future reservoir DO profiles will remain similar to historic profiles, except they will start at an elevation 4 feet higher. Since the 3 reservoir outlets are fixed in elevation, they will appear to be 4 feet deeper in the reservoir (and profile). The analysis will assume that the water will be drawn from 4-feet lower in the reservoir.

During initial filling of the reservoir, there may be localized effects on reservoir DO from inundation and decay of 47 acres of vegetation. However, the overall effect on reservoir DO and downstream effects will not be significant because of the relatively small increase in surface area.

The District will examine the existing algae layer and evaluate the extent of diurnal DO fluctuations. Operational modifications will be considered to reduce the effects of water withdrawals at depths 4 feet below existing levels. However, as stated above the downstream reach re-aerates quickly.

**2. Water Temperature Effects**

As described in item 1 above, the District operates the Stagecoach Project to provide preferred water temperatures for the downstream sport fishery, as discussed in the project EIS. Because of the effective 4-foot increase in depth, it would be possible to provide slightly cooler water for the downstream fishery, which would be a minor benefit.

**3. Potential Increase of Algae in the Reservoir**

The presence of algae in the Stagecoach reservoir is a function of nutrient levels. Shallow reservoirs or shallow areas of a large reservoir area permit growth of aquatic plants whose decay provides nutrients for algae. The addition of 47 acres of land that would be inundated could slightly increase the potential for algae, but this would be offset by a reduction in other areas of the reservoir that would be 4-feet deeper and have fewer aquatic plants. Therefore the net result would be an insignificant increase in algae from the reservoir capacity increase.

## 4. Potential Contamination from Vault Toilets

As discussed under item 12 below, the three vault toilets will be replaced, negating the potential for contamination.

## 5. Impact on Frazil Ice and Downstream Fog

The district has been advised by the Colorado Division of Water Resources that there has been no evidence of frazil ice down stream affecting the stream or Catamount Lake. Downstream fog would not be affected by the reservoir capacity increase.

## 6. Escapement of Northern Pike from Reservoir

The District will consider the potential for increased escapement of northern pike from Stagecoach Reservoir due to the proposed 4-foot increase in dam height. Three potential avenues of entrainment occur at Stagecoach Reservoir; entrainment through the powerhouse, over the spillway, and through the bypass jet valve. The Stagecoach Reservoir entrainment report, which found no entrainment of fish through the powerhouse, will be analyzed to determine the potential for entrainment and subsequent downstream escapement of all size classes of northern pike through each of these potential entrainment avenues.

Operations will be analyzed to determine the timing, frequency and duration of spill flows and operational releases that may entrain northern pike through all three potential avenues. The District will assume that the reservoir levels will be four feet higher than historic levels. Since the 3 reservoir outlets, on the intake tower, are fixed in elevation, they will appear to be 4 feet deeper in the reservoir. The analysis will assume that the water will be drawn from 4-feet lower in the reservoir. The new spillway will be located on the surface and located four feet higher than current conditions.

The District will analyze the level of mortality expected for northern pike entrained through each of the three potential avenues. Based upon this information, the District will be able to establish the potential level of escapement of entrained northern pike under current and proposed conditions.

The District anticipates that the increase in dam elevation by 4 feet will have little to no effect on the potential for escapement by northern pike. With the exception of the spillway, the outlet structures will not be modified and their effect on entrainment is not expected to change. Pressure and velocities through the outlet structures are not expected to change significantly with the raise, resulting in similar conditions for mortality to those under current conditions. In addition, the frequency and duration of spring runoff flows (spill flows) will most likely be equal to or less than under current conditions due to the increased capacity of the reservoir.

## 7. Increase in Northern Pike Spawning Habitat

Concern was expressed during the agency meetings about the increase in northern Pike spawning habitat that might be associated with the flooding of new land where the amount of shallow vegetated shoals would increase, thus increasing the amount of potential northern Pike spawning habitat. The fact that northern Pike, first observed in the Stagecoach Reservoir in 1994 and in 12 years have become a species of prime management concern, documents that the conditions suitable for northern Pike spawning are readily present at this location. The problem can potentially be alleviated if escapement of northern Pike from Stagecoach Reservoir can be controlled. In addition, the construction of closed wetland mitigation basins along the new reservoir shoreline at the 7,204 foot elevation would allow northern Pike to enter these basins during high shallow water but be trapped and prevented from escaping backing into the reservoir basin once they have spawned. In summary, the Applicant believes that the current management practices utilized by the CDOW, which accept the existing populations of northern Pike in the Stagecoach Reservoir and manage around this problem by stocking larger sport fish is probably the best potential solution to this problem. Also as documented in the U.S. Fish and Wildlife Service's report by Roehm (2004), potential problems of northern Pike in the Yampa River above Hayden are of minor concern.

## 8. Effect on Ice Fishing and Spring Fishing with Ice Off

Ice fishing will continue as heretofore. The Division of Parks will control the safe access period. The 3,185 acre-foot change in storage capacity will not significantly affect the timing of ice formation on the reservoir, as this is driven more by climate.

The District is evaluating the effects of reservoir filling on spring fishing. The District does not anticipate an effect, but is in the process of assessing how the reservoir filling would occur during a dry, average and wet water year based on the District's operating criteria that water storage has a higher priority than power generation.

## 9. Water Depletion Impact of Threatened and Endangered Species (Section 7 Consultation)

Resource Engineering is currently in the process of modeling reservoir levels as part of a yield study. They will be supplying information on expected additional evaporative losses from the reservoir surface, as well as consumptive losses for new water sales at full utilization. This information will be utilized for Endangered Species Act Section 7 consultations.

## 10. Wetland Impacts and Associated Mitigation

The District is in the process on quantifying the exact amount of wetlands above the existing reservoir shoreline that will be affected with the elevated water level. These impacts include the existing wetlands that have become established since the reservoir was built, as well as natural wetlands which will be impacted. All of these impacts will be quantified and an Individual 404 Permit Application will be submitted to the U.S.

Army Corps of Engineers. Compensatory wetland mitigation will be required to off-set these new wetland impacts. Mitigation will consist of examining the previously approved wetland mitigation efforts, utilized for the original reservoir, which consisted of new wetlands which were to form along the shoreline of the reservoir, on-site wetland creation and off-site wetland mitigation completed along the Yampa River.

All of the wetlands which will be impacted by this action will be subjected by compensatory wetland mitigation efforts, if required, which will be quantified through detailed modeling, and will take into account the new wetlands which will form along the new reservoir shoreline. If this modeling effort demonstrates that additional mitigation is required, then those flatter portions of the shoreline will be subjected to wetland creation efforts which have been recently utilized on other reservoir projects in Northwest Colorado. These new compensatory wetland creation areas will consist of closed depressions constructed on shallow benches at the 7,204 foot elevation, which will be flooded during high water and which will hold water for several weeks during the early spring. The basins will be graded and then wetland topsoil, which will be salvaged from wetland areas which will be flooded by the new water level, will be respread onto these newly created wetlands. The 404-Permit will contain a wetland mitigation monitoring schedule which will require that the success of these wetland mitigation efforts be regularly monitored and the results submitted to the Corps of Engineers. In the unlikely event that these wetland creation efforts are not successful, then the 404-Permit will contain contingency plans which will ensure that all of the wetlands affected by the project are mitigated.

**11. Impacts to Sharp-tail Grouse Habitat**

Two active Sharp-tail grouse leks have been discovered near the south shoreline of Stagecoach Reservoir. These leks are located immediately adjacent to the water where the high water has altered the native vegetation and made these areas relatively open and free of the natural Sagebrush which normally occurs in this area. Sharp-tail grouse normally occupy these leks between the middle of April until about the middle of May. Since these two leks will potentially be disturbed by the elevated water table there is the concern that this action could adversely affect the breeding activities and thus the population density of this species of concern.

Examination of the historic hydrograph of the water levels of Stagecoach Reservoir indicate that in most years the reservoir does not fill in the spring until after the normal breeding period of the Sharp-tail grouse. Thus it is believed that in most years the breeding activities on these active leks will be completed before they are flooded by the new water level. Since these two leks appear to have been selected based upon the altered vegetation patterns associated with the current reservoir, which has eliminated the native vegetation, it is expected that with the new water level, the vegetation will be altered similarly and for these two reasons, it believed that the adverse affects on this species will be minimal.

## 12. Recreation Resources Affected and Mitigation

On September 1, 2006, the District reviewed with Stagecoach Park Manager, Mike Taylor the impacts the proposed four-foot raise of the reservoir would have on the recreation facilities. The following mitigation measures were identified.

a) Swim Beach - By raising the beach area with the import of sand and enlarging the area by excavating the bank adjacent to the beach, the impact will be mitigated. A 20-foot diameter concrete patio will be rebuilt at a higher location.
b) Impact to reservoir trails will be minimal.
c) About 20 affected trees will be relocated.
d) The boat ramp on the south side will be extended by the addition of four feet of gravel fill.
e) Three vault toilets will be impacted. New toilets will be built at higher locations.
f) No other impacts of significance were anticipated.

## 13. Effect on Float Fishing

The only impact on float fishermen could be access to inundated areas under County Road number 14 bridge. Appropriate signage will be installed to alert the fishing public of the possibility of limited head room.

## 14. Potential flooding of County Road

The District has evaluated the potential for flooding of the County road and concluded that it is above elevation 7204 feet and will not be flooded.

## 15. Requirement for Floodplain Development Permit

The District has contacted the Colorado Water Conservation Board and will apply for a Conditional Letter of Map Revision (CLOMR) when construction plans for the spillway allow reservoir routing of the 1% chance flood. Other than the rise of the normal reservoir elevation, the project is not expected to have any significant impact on floodplains.

## 16. County PUD Amendment

On August 30, the District met with Chad Phillips of Routt County Planning and obtained the forms to apply for an amendment to the Stagecoach PUD. The primary changes will be those to the recreational resources listed above. In a follow up discussion with Mr. Phillips on September 5th, Mr. Phillips did not foresee any problems with obtaining the necessary amendment.

## 17. Effects on Shoreline Erosion

Concerns have been expressed regarding the potential of increased erosion of the soils along the new shoreline once the water level is elevated. This is not considered to be a problem of significant concern for a number of reasons. Examination of the existing shoreline reveals that this concern cannot be substantiated by the existing reservoir. Several explanations exist as to why the shoreline erosion of the existing shoreline is not a concern and which by interpolation can be used to document that the new shoreline will likewise not create additional problems associated with shoreline erosion. As are documented in the wetland delineation report, most of the shoreline associated with the existing reservoir consists of relatively flat slopes. The elevated shoreline will also consist of similarly flat slopes. The effect of an elevated water level on flat slopes means that the waves will run up these shall slopes and due to the relatively stable water levels will created new shoreline fringe wetlands which will reduce the potential of shoreline erosion. In addition, the effect of wave action on a flat shoreline is that there is a reduced potential for shoreline erosion as the energy of the waves will be dissipated over a broader area, meaning the potential for erosion will be lower than for areas where the energy of the waves will be dissipated over a narrower steeper segment or shoreline.

The operational plan employed by the Colorado State Parks for Stagecoach Reservoir further reduces the potential for erosion, especially by motor boats and water skiers, which are commonly seen on other reservoirs. Under the current operational plan, nearly the entire west half of the reservoir is off limits to high speed boats and thus lacks significant wave action. This lack of wave action significantly reduces the potential of shoreline erosion.

Examination of the unpublished NRCS soils map and correspond soils descriptions, found in the Wetland Delineation Report, documents that as a general rule most of the soils are relatively shallow and overlay parents very high in rock fragment content or else are bedrock. These soils themselves are also relatively high in rock fragment content. This means that even with the elevated water level and associated wave action, there is a reduced potential for erosion because with even only a minor amount of wave action these soils will quickly become armored with the existing rocks contained in the solum and the potential for shoreline erosion will be insignificant.

## 18. Reservoir Operation

Although not identified as a specific issue, operation of the reservoir will continue as heretofore. The water flow yield of the basin indicates that the reservoir will fill with the additional 3,185 acre-feet of storage. Run off studies over the past 30 years indicate that even with the additional capacity of 3,185 acre-feet, the reservoir will fill. Based on the snow pack prediction in January and February, power generation is regulated to favor water storage over power generation. The District will illustrate typical reservoir filling in the license amendment during dry, average and wet years based on the above described operation.

**UPPER YAMPA WATER CONSERVANCY DISTRICT**
**STAGECOACH HYDROPOWER PROJECT—LICENSE AMENDMENT**
**FERC PROJECT No. 9202**

**DRAFT AGENCY MEETING MINUTES**
**AUGUST 16, 2006**

**Attending Parties:**

| Name | Agency | Phone Number | E-Mail Address |
|---|---|---|---|
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| Jeff Dawson | URS Corporation | 303-740-2793 | jeffrey_dawson@urscorp.com |
| Wayne Dyok | MWH Americas | 916-418-8252 | wayne.dyok@mwhglobal.com |
| Ronald J. Edgar | Yampa Town Board | 970-638-4566 | (None Listed) |
| Dan Ellertson | Upper Yampa Water Conservancy District | 970-736-2437, 970-846-0097 | upperyampa@mwwater.com |
| John Fetcher | Upper Yampa Water Conservancy District | 970-879-2424 | upperyampa@mwwater.com |
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| Mary Alice Page-Allen | Routt County Planning | 970-879-2704 | mpage-allen@co.routt.co.us |
| Bruce Pitts | Yampa Town Board | 970-638-4511 | (None Listed) |
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| Jean Ray | CO Division of Water Resources | 970-879-0272, ext. 6011 | jean.ray@state.co.us |
| John Redmond | Upper Yampa Board | 970-638-0918 | john.redmond@mwhglobal.com |
| Kris Wahlers | Colorado State Parks—Stagecoach | 970-736-2436 | kris.wahlers@state.co.us |

## I. Introduction

Mr. John Fetcher of the Upper Yampa Water Conservancy District (UYWCD), welcomed resource agency and government officials to the Resource Agency Meeting concerning a proposed amendment to the Stagecoach Hydropower Project (FERC No. 9202) license. The purpose of the meeting was to present local, state and federal agencies with UYWCD's proposal to increase the reservoir level of the Stagecoach Project by four feet, in order to provide for future water needs. The UYWCD asked the attending agencies and organizations to help it to identify potential issues with the proposed reservoir level increase. UYWCD will address these issues in the FERC license amendment application.

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An amendment to the Stagecoach Project license from the Federal Energy Regulatory Commission (FERC) is needed in order to implement this change in reservoir level. Consulting with various agencies and with the general public is one of the required steps for acquiring a license amendment.

## II. Presentation

Following Mr. Fetcher's introduction, Mr. Wayne Dyok of MWH Americas, Mr. Jeff Dawson of URS Corporation and Mr. Kent Croffs of IME delivered a PowerPoint presentation to the meeting participants outlining the project's history, the need for water use in the region, how the proposal will be implemented if it is approved and the impact of this reservoir increase on project resources. An agenda was provided to the participating agencies which included the following items:

- FERC License Amendment Process;
- Stagecoach Project History;
- Description of Existing Facilities and Proposed Project;
- Purpose and Need; and
- Environmental Resources, Issues and Information needs.

Each of these topics is discussed briefly below.

### *FERC License Amendment*

Amending a FERC project license usually includes the following steps: 1) consulting with governmental agencies and the public; 2) conducting environmental studies as needed; 3) preparing a draft application for license amendment; 4) circulating the draft application to agencies, interested parties and individuals to review and comment on; and 5) filing the final application with FERC that addresses agency and public comments. FERC then issues a Public Notice for the proposed project amendment, and requests that interested parties submit comments to them. After reviewing the revised proposal and all filed comments, FERC then determines whether or not to approve the proposed license amendment.

### *Stagecoach Project History*

The Stagecoach Project was licensed by FERC in 1987 with an expiration date of 2037. The project license includes several terms and conditions to protect project resources (such as recreation, water quality monitoring, etc.). UYWCD now proposes to increase the reservoir level to better provide for future water needs. Should its request to increase the reservoir level be approved, UYWCD will continue to abide by those terms and conditions established in the project license, and any new terms included in the license amendment.

***Description of Existing Facilities and Proposed Project***

*Existing Facilities*

The Stagecoach Project currently has a 771-acre reservoir with a storage capacity of 33,275 acre-feet. The project's roller-compacted concrete (RCC) dam measures 150 feet high. The maximum water elevation is currently 7,200 feet. The project's hydroelectric power plant has an 800 kW capacity. The Stagecoach Project is essentially a run-of-river facility, and is certified green power by the Low Impact Hydropower Institute.

*Proposed Project*

The UYWCD proposes to include an amendment in the Stagecoach Project license that would increase the project's water supply in critical years by raising the spillway four feet. This four-foot raise would be undertaken by placing a cast-in-place concrete reinforced ogee spillway on top of the existing spillway. The result would be an increased of 3,185 acre-feet in storage capacity.

As noted below in Table 1, the Stagecoach Project's reservoir storage is currently utilized for a variety of purposes. Increasing the reservoir level will better assist the UYWCD to meet future water resource needs.

***Table 1: Stagecoach Reservoir Water Storage***

| **WATER USAGE** | **CURRENT USAGE (ac-ft/yr)** |
|---|---|
| Irrigation | 4,000 |
| Municipal | 2,000 |
| Industrial | 7,000 |
| Uncommitted | 2,000 |
| Dead Storage | 3,275 |
| Recreation | 15,000 |
| **TOTAL** | **33,275** |

Under the proposal, no structural modifications to the dam would be required. The project would continue to provide the required minimum downstream flows. Any changes to project operations and downstream flows would be minor. More water would be stored during the high flow period in the spring and released during dryer periods later in the year. However, summer water levels would be similar to current operations, except the reservoir would be four feet higher. The water level increase would allow the UYWCD to better utilize the project's water supply, and would increase the recreational capacity of the project reservoir by about 6 percent.

*Waiver*

The UYWCD proposes to seek a waiver from FERC to forego the draft application process, provided that resource agencies and other interested parties concur. By doing so, UYWCD hopes to streamline the project amendment process and ensure that the

proposed construction can take place in 2007, as is currently slated, followed by increasing the reservoir level in 2008. By eliminating the draft application, the UYWCD hopes to improve its efficiency and lower the cost associated with the proposed action.

Although the draft application is proposed to be omitted, there are still at least two opportunities for agencies, interested parties and private citizens to file comments concerning the proposed plan. The first opportunity is between now and October 15, 2006. These comments should be filed with UYWCD, and will be addressed in the license amendment application. The second opportunity will be initiated by FERC's issuance of a Public Notice after the application has been filed. The notice will request that comments be submitted to FERC; these comments will be addressed in FERC's Environmental Assessment (EA). Issuance of the EA offers a third opportunity for comment if issues have not been resolved at the application filing stage.

***Purpose and Need***

The primary purpose for the increased reservoir level is to ensure that a water supply is available for population growth. Additionally, the proposal will increase reservoir surface area to provide for additional recreational opportunities. The increased reservoir level will also result in an increased head (i.e., elevation difference between the reservoir surface and the tailwater at the powerplant) - leading to an increase in hydroelectric power generation by approximately six percent.

The reservoir increase will allow for the augmentation of late summer/fall base flows, which would help threatened and endangered species residing downstream. The proposed reservoir increase will also allow the Stagecoach Project to be in compliance with the Colorado Water supply for the 21st Century Act, and can be included in the Yampa district's master plan to supplement well water permits in the future.

***Environmental Resources, Issues and Information Needs***

In order to receive FERC approval for a license amendment, project licensees are required to first evaluate the proposal's impact on the following project resources: 1) water use and quality; 2) fish and aquatic resources; 3) wildlife and botanical resources; 4) wetlands and riparian habitat; 5) rare, threatened and endangered species; 6) geological and soil resources; 7) recreation resources; 8) land use; 9) aesthetics; and 10) cultural resources.

Based on the UYWCD's preliminary assessment on the proposed reservoir increase, the following project resources have been identified as potentially being impacted:

- water quality issues (temperature and dissolved oxygen);
- reservoir fish and aquatic resources;
- Yampa River fish and aquatic resources downstream of the project;
- wildlife;
- wetlands;

- threatened and endangered species;
- soil erosion;
- recreation resources; and,
- wetland and riparian habitats.

*Existing Project Resources*

*Reservoir Management.* The reservoir fills in the spring, and then is drawn down between fall and early spring. Its peak storage is predicted by snow pack, and controlled by releases prior to run-off. The project's minimum flow requirements are shown below.

Minimum Flow Requirements at the Stagecoach Project:

December 1 to July 31 → 40 cfs or inflow
August 1 to November 30 → 20 cfs

*Water Quality.* Both water temperature and dissolved oxygen (DO) are monitored by two stations downstream. DO levels released at the project are required to be at least 6.0 mg/l at 1,000 feet below the dam. A goal of 4.0 mg/l or greater is maintained in the stilling basin.

Water temperature can be regulated by changes in outflow through three different gates, located at three different depths in the reservoir to provide optimum temperature for fish downstream.

*Reservoir Fish and Aquatic Resources.* Reservoir fish include rainbow trout, northern pike and white suckers. There is some spawning by rainbow trout at the project inlet in the spring and fall, while white suckers spawn at riffles or windswept shores. The project reservoir is stocked with approximately 45,000 rainbow trout annually by the Division of Wildlife.

Northern pike populations restrict the natural recruitment of other species. Management of the reservoir is aimed at reducing pike predation on trout. By waiting until the fall to stock trout, the trout released are larger in size, which deters pikes from preying on them.

*Yampa River Fish and Aquatic Resources.* A total of nine species of fish are known to populate these waters. Among them, the rainbow trout is most abundant. Spawning occurs just below the dam, with rainbow trout spawning during June and July when flows are high, and mountain whitefish spawning in October.

Downstream from the dam, there is a catch-and-release program for the first 0.6 miles. After the first 0.6 miles, there is a maximum catch limit of two fish in place.

Although there would be minor changes to project flows - decreased late spring/early summer flows, and possible flow increases at other times of the year - the project would continue to meet its minimum flow requirements at all times. The UYWCD is

coordinating with Colorado Division of Wildlife to accommodate the flow needs of spawning and wintering fish.

*Wildlife and Botanical Resources.* Habitats present at the Stagecoach Project include wetlands, aquatic habitat, sagebrush areas and meadows.

The project also includes waterfowl nesting areas. Approximately 500 elk winter in the vicinity of the project, and in the summer project lands become a concentration area for mule deer. Small game and bird hunting is allowed in-season.

The proposed increase in the reservoir level would add approximately 47 acres to the reservoir, and impact about 27 acres of upland habitat.

*Wetlands.* Approximately 20.5 acres of wetlands would be affected by the increase in reservoir level. A Section 404 Permit from the U.S. Army Corps of Engineers (USACE) would be required for the impacted wetlands. The measures used to mitigate the impact to wetlands, such as the development of new wetlands located further away from the project reservoir, would provide functions equivalent to those lost from the raised reservoir level.

There are several ponds that were originally created by UYWCD in order to mitigate the loss of wetlands caused by the construction of the project. There would be no effect on these improvements.

*Rare, Threatened and Endangered Species.* Rare, threatened and endangered species residing in the project area include the: bald eagle, greater sandhill crane, Northern leopard frog, bonytail, Colorado pikeminnow, humpback chub and razorback sucker. Other than the eagle and frog, these species are located well downstream of the project. The bald eagle and greater sandhill crane are not expected to be impacted. The Northern leopard frog, however, could be affected by the inundation of wetlands and thus, loss of habitat. Since new wetlands will be created to mitigate these losses, any impacts to the frog would be short-term. Impacts to the aforementioned fish species will be addressed during continued consultation between the UYWCD and the U.S. Fish and Wildlife Service (USFWS), pursuant to Section 7 of the Endangered Species Act.

*Geological and Soil Resources.* The project reservoir is part of the Brown Park formation and consists mostly of sandstone. A seismicity study for the dam design has been previously conducted. No effects on geological resources are anticipated.

Minor soil erosion from wave action is expected to result from the proposed reservoir increase. This erosion would be temporary and would stabilize over time.

*Recreation Resources.* The Stagecoach State Park is located within the Stagecoach Project boundary. This land is owned by UYWCD, but is leased to the Colorado State Parks (CSP) to operate and maintain the Stagecoach State Park. Recreational activities at

the park include camping, boating, fishing, hiking, swimming, water skiing, sailing, etc. In 2005, the park recorded having 162,500 visitors.

The proposed increase in reservoir level would cause a six percent increase in reservoir surface area. This surface area increase would increase the recreational capacity of the reservoir. However, it would also "potentially" inundate the following Stagecoach Park facilities: 1) boat ramps; 2) a portion of the wildlife observation area; 3) swim beach; 4) hiking trail; 5) restroom storage vaults; 6) concrete picnic pad; and 7) trees and irrigation systems. The UYWCD will work with CSP to ensure that all impacts to recreational resources are mitigated.

*Land Use*. As mentioned above, the lands surrounding the project reservoir on which the Stagecoach State Park is located are owned by the UYWCD and leased to CSP. This land is zoned "OR," for Outdoor Recreation.[1] Other land uses include dryland pasture for livestock grazing, a residential area south of the reservoir, a wastewater treatment plant and wetlands habitat preserve. No acquisition of land would be needed to implement the proposed reservoir increase.

*Aesthetic Resources*. The Stagecoach Project area is notable for its scenic quality and value. The increase in reservoir level would not cause any changes to this scenic quality - the dam modification would only be visible immediately downstream; high water levels would continue during the warm months for both aesthetic and recreational purposes.

*Cultural Resources.* A class III cultural resources survey of the project area was conducted in 1984. The survey revealed the presence of three prehistoric and 11 historic sites. None of these sites were eligible for listing on the National Register of Historic Places; therefore, the increased reservoir level will have no impact on cultural resources.[2]

## III. Discussion—Agency Issues and Concerns

### *Reservoir Stratification and Algae Blooms*

A Colorado Division of Water Resources (CDWR) representative noted that although the presentation stated that water can be withdrawn from any of the three gates in the project in order to control downstream water temperature and dissolved oxygen, only the two upper-most gates are utilized for downstream releases. This representative said that the bottom layer was "black" in color and referred it to it as the "septic" layer. He also noted that the top reservoir layer has experienced an increase in algae, which has affected downstream DO levels[3]. Since the intake would be four feet deeper relative to the new reservoir level, CDWR asked about the effect this might have on downstream DO levels.

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[1] Mary Alice Page-Allen of Routt County Planning. August 16, 2006.

[2] In a letter dated August 2, 2006, the Colorado Historical Society stated that no historic properties would be affected.

[3] In subsequent discussions with the station operator, the bottom layer is no longer present and operations have been modified over the past two years to draw water from all three gates at different times of the year. UYWCD will provide this information in the application filed with FERC.

The UYWCD has identified the conflict between releasing water in the lower layer of the reservoir (which generally has a lower temperature and lower dissolved oxygen content), and releasing water in the higher layer of the reservoir (which generally has a higher temperature and higher dissolved oxygen content). The Yampa River downstream from the powerplant rapidly re-aerates, so mechanical aeration has not been necessary to meet DO requirements. Additional analysis will be conducted to assess DO and temperatures downstream of the powerplant.

***Dissolved Oxygen and Minimum Flow Requirement***

Ms. Libbie Miller (Colorado Division of Wildlife -CDOW) asked about the potential impact on downstream DO, and the project's ability to continue to meet its minimum flow requirement. As stated previously, only minimal changes to flows are anticipated; however, the project would continue to meet its minimum flow requirement after the proposal is implemented. UYWCD will assess the proposal's impact on DO further in the amendment application. The UYWCD would continue to monitor the downstream DO levels after the proposal is implemented. Although not expected, if the dissolved oxygen levels decrease as a result of the increased reservoir level, UYWCD would discuss mitigation options with the resource agencies.

***Northern Pike and Rainbow Trout***

Ms. Patty Gelatt of the USFWS expressed concerns that the increased reservoir levels could increase the amount of northern pike habitat and pike breeding at the Stagecoach Project. This increase in habitat could lead to an increase in the northern pike population. Any increase in the northern pike population could lead to an increase in predation on trout. Further, increased escapement of pike from the reservoir would allow the pike to prey on trout and threatened and endangered fish species located downstream. The participants acknowledged that some degree of pike escapement does occur now. The agencies are concerned that more pike might escape with the higher reservoir levels.

In order to mitigate the number of trout being preyed upon by northern pike, CDOW has been stocking trout later in the fall when the trout are larger, since northern pike will only prey on smaller trout. Additionally, CDOW recommended keeping the reservoir lower during the spring to protect the recreational reservoir fishery. This might facilitate spring fishing for rainbow trout when the spring "ice off" condition first occurs. However, UYWCD responded that that is not how the reservoir would be filled. Essentially the snow melt would be captured as it flows into the reservoir. The amount of daily capture would be dependent upon the flow forecast and existing reservoir level.

In response to a question about a fisheries lake management plan, CDOW commented that there was no formal lake management plan. CDOW manages the reservoir as a trout fishery (via stocking) and as a trophy pike fishery.

*Sharp-Tail Grouse*

Ms. Libbie Miller (CDOW) noted that the shoreline between the water and vegetated areas is used as leks by sharp-tail grouse in early spring. She expressed concern that lek habitat could be reduced when the reservoir is filled above 7,200 feet. Areas further upland may not have sufficient open space for breeding and nesting, because the upland sagebrush vegetation is not suitable for use as a lek. Ms. Miller added that the nesting is done by mid-May.

The UYWCD noted that although this barren shoreline would be eliminated, and upland sagebrush habitat is not suitable for sharp-tail grouse, sagebrush vegetation is intolerant to water. Therefore, when the reservoir level increases and this vegetated area becomes the new project shoreline, the sagebrush vegetation present would eventually die out. After this occurs, former sagebrush habitat could be converted to barren habitat, which could mitigate the impact to the sharp-tail grouse.

*Wetland Mitigation*

Several agencies were concerned with the impact of the proposed reservoir increase on existing wetlands. Approximately 20.5 acres of wetlands and 3.7 acres of wetlands at the mitigation ponds at the inlet would be affected. The UYWCD commented that wetland areas surrounding the reservoir have changed since 1989, when the reservoir was first filled. UYWCD will apply for a Section 404 permit with the U.S. Army Corps of Engineers (USACE). The Section 404 permit application would be coordinated with the FERC amendment application. In order to mitigate the wetlands impact, the UYWCD would create additional wetlands that would provide functions equivalent to those lost from the implementation of the proposed reservoir increase. Most likely areas within the project boundary would be identified for potential wetland mitigation areas.

It was noted that the sharp-tail grouse, wetland, and Northern pike issues would need to be coordinated. The participants also acknowledged that the USACE were unable to attend the meeting, because they had mandatory training.

*Moose Habitat*

A member of the Colorado Division of Water Quality stated that the impact to moose habitat in the upper section of the project reservoir needed to be assessed. However, Ms. Libbie Miller noted that although random sightings of moose had been recorded, there is no regularly used moose habitat. Therefore, the project would not affect moose.

*Recreation Resources*

Mr. Kris Wahlers stated Colorado State Parks (CSP) concerns with the proposal's impact on the Stagecoach State Park's recreational resources. Specifically, the CSP wanted to know how those resources that were inundated by the increased reservoir level, such as

boat ramps and the vault toilets, would be mitigated. The possibility of the vault toilets contaminating the reservoir is also an issue that needs to be addressed.

The UYWCD responded that all the impacted recreation resources were surveyed and are being assessed by an engineer. If these resources are impacted, the impacts will be mitigated and/or the resource will be replaced upland by the licensee.

At this time, it is not known whether the vault toilets will be inundated or in any way impacted by the proposal. The UYWCD has requested the facilities' as-built drawings, construction requirements and survey information from the CSP to assess what, if any, impact they will encounter. The final assessment of the vault facilities will be included in the license amendment application. It was suggested that UYWCD talk to the contractor responsible for pumping out the vault toilets, as that contractor could probably identify whether the toilets are leaking.

UYWCD stated that the construction would be scheduled so as not interfere with the prime summer recreation season. The reservoir may need to be drawn down several feet for construction, but this could be accommodated after the prime summer recreation period. If the amendment application and associated permits are approved, construction on the Stagecoach Project including recreation mitigation would likely begin in late summer/early fall 2007. All construction would be completed in time for the 2008 recreation season; the reservoir would be filled to its new level in 2008, if sufficient runoff is available.

***Land Use***

Routt County stated that UYWCD would need to obtain a floodplain development permit from the County. The existing PUD plan would need to be amended. UYWCD agreed to investigate the requirements for a floodplain development permit and an amendment to the PUD plan. UYWCD will be responsible for applying for and acquiring all necessary permits and amendments prior to beginning construction. Routt County also corrected UYWCD on the land use zoning. The project area is zoned OR, outdoor recreation.

***Purpose of Proposal and Waiver Request***

Patty Gellat of the USFWS asked the UYWCD to reiterate its justification for increasing the reservoir level at the Stagecoach Project, and why it sought the waiver of a draft application from FERC.

The primary purpose of the proposal is to create additional storage for water resources. As the population around the Steamboat Springs, Colorado continues to grow, additional water resources will be needed to provide for future development. Along with this population increase and correlating increase in demand on water resources, an increase in water-related recreational opportunities has occurred. In addition to increasing the available water supply, this proposal would increase the reservoir's surface area, thereby providing additional recreation capacity at the project reservoir.

The UYWCD stated that in order to stay on its current schedule (to have the amendment approved by FERC in late winter or early spring, construction completed in late 2007, and the reservoir level raised in 2008) the amendment application needs to be processed and ready for review quickly. This can be accomplished if FERC agrees to waive the draft application. Additionally, this waiver would increase the efficiency of the process. UYWCD plans to ask the agencies to support a waiver request, but only if the agencies are comfortable with the amendment process.

## IV. Action Items

The UYWCD will address the agencies' concerns and issues, as discussed above, in the license amendment application. UYWCD will provide information on how the issues will be addressed in the amendment application as an attachment to the draft meeting minutes. UYWCD will coordinate with the resource agencies during the preparation of the application itself to ensure that the issues are being adequately addressed.

All additional comments should be submitted to the UYWCD by October 15, 2006, in order to be included in the license amendment application. The UYWCD plans on filing the license amendment application with FERC in late 2006. The Section 404 permit will be applied for in the fall as well, along with a Section 401 permit with the Colorado Division of Water Quality. Pursuant to the filing of the FERC application, FERC will issue a Public Notice soliciting comments, protests and protests in opposition. Additionally, the USACE will also solicit public and agency comments.[4]

[4] An additional issue of winter fog on the south valley floor was raised by Mr. Doug Monger. This is an issue relating to water temperature requirements downstream of the Stagecoach project and not an amendment application issue. Thus it will not be addressed in the amendment application.

**UPPER YAMPA WATER CONSERVANCY DISTRICT**
**STAGECOACH HYDROPOWER PROJECT—LICENSE AMENDMENT**
**FERC PROJECT No. 9202**

**DRAFT PUBLIC MEETING MINUTES**
**AUGUST 16, 2006**

**Attending Parties:**

| Name | Affiliation | Phone Number | E-Mail Address |
|---|---|---|---|
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| Kent Croffs | IME | 970-638-4462 | kent@imeyampa.com |
| Jeff Dawson | URS Corporation | 303-740-2793 | jeffery_dawson@urscorp.com |
| Alexis DeLaCruz | *Steamboat Pilot & Today* (newspaper) | 970-871-4234 | adelacruz@steamboatpilot.com |
| Wayne Dyok | MWH Americas | 916-418-8252 | wayne.dyok@mwhglobal.com |
| John Fetcher | Upper Yampa Water Conservancy District | 970-879-2424 | upperyampa@mwwater.com |
| Kate D. Miller | MWH Americas | 434-942-8678 | kdebragg@vt.edu |
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| Arlene Porteus | Yampa Town Board | 970-638-4496 | porteus@springsips.com |
| Mike Ratliff | Private Citizen | 970-736-2635 | dandmratliff@springsips.com |
| Janet Ray | Yampa Town Clerk | 970-638-4511 | jray@townofyampa.com |
| Dean Rossi | (None Listed) | 970-736-2648 | (None Listed) |
| Tom Yackey | Yampa Resident | 970-734-4547 | teyackey@yahoo.com |

## I. Introduction

Mr. John Fetcher of the Upper Yampa Water Conservancy District (UYWCD), welcomed members of the community and private citizens to the Public Meeting concerning a proposed amendment to the Stagecoach Hydropower Project (FERC No. 9202) license. The purpose of the meeting was to present the public UYWCD's proposal to increase the reservoir level of the Stagecoach Project by four feet, in order to provide for future water needs. The UYWCD asked the attendees to help it identify potential issues with the proposed reservoir level increase. UYWCD will address these issues in the FERC license amendment application.

An amendment to the Stagecoach Project license from the Federal Energy Regulatory Commission (FERC) is needed in order to implement this change in reservoir level. Consulting with various agencies and with the general public is one of the required steps for acquiring a license amendment.

## II. Presentation

Following Mr. Fetcher's introduction, Mr. Wayne Dyok of MWH Americas, Mr. Jeff Dawson of URS Corporation and Mr. Kent Croffs of IME delivered a PowerPoint presentation to the meeting participants outlining the project's history, the need for water use in the region, how the proposal will be implemented if it is approved and the impact of this reservoir increase on project resources. An agenda was provided to the participating agencies which included the following items:

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Each of these topics is discussed briefly below.

### *FERC License Amendment*

Amending a FERC project license usually includes the following steps: 1) consulting with governmental agencies and the public; 2) conducting environmental studies as needed; 3) preparing a draft application for license amendment; 4) circulating the draft application to agencies, interested parties and individuals to review and comment on; and 5) filing the final application with FERC that addresses agency and public comments. FERC then issues a Public Notice for the proposed project amendment, and requests that interested parties submit comments to them. After reviewing the revised proposal and all filed comments, FERC then determines whether or not to approve the proposed license amendment.

### *Stagecoach Project History*

The Stagecoach Project was licensed by FERC in 1987 with an expiration date of 2037. The project license includes several terms and conditions to protect project resources (such as recreation, water quality monitoring, etc.). UYWCD now proposes to increase the reservoir level to better provide for future water needs. Should its request to increase the reservoir level be approved, UYWCD will continue to abide by those terms and conditions established in the project license, and any new terms included in the license amendment.

***Description of Existing Facilities and Proposed Project***

*Existing Facilities*

The Stagecoach Project currently has a 771-acre reservoir with a storage capacity of 33,275 acre-feet. The project's roller-compacted concrete (RCC) dam measures 150 feet high. The maximum water elevation is currently 7,200 feet. The project's hydroelectric power plant has an 800 kW capacity. The Stagecoach Project is essentially a run-of-river facility, and is certified green power by the Low Impact Hydropower Institute.

*Proposed Project*

The UYWCD proposes to include an amendment in the Stagecoach Project license that would increase the project's water supply in critical years by raising the spillway four feet. This four-foot raise would be undertaken by placing a cast-in-place concrete reinforced ogee spillway on top of the existing spillway. The result would be an increased of 3,185 acre-feet in storage capacity.

As noted below in Table 1, the Stagecoach Project's reservoir storage is currently utilized for a variety of purposes. Increasing the reservoir level will better assist the UYWCD to meet future water resource needs.

***Table 1: Stagecoach Reservoir Water Storage***

| WATER USAGE | CURRENT USAGE (ac-ft/yr) |
|---|---|
| Irrigation | 4,000 |
| Municipal | 2,000 |
| Industrial | 7,000 |
| Uncommitted | 2,000 |
| Dead Storage | 3,275 |
| Recreation | 15,000 |
| **TOTAL** | **33,275** |

Under the proposal, no structural modifications to the dam would be required. The project would continue to provide the required minimum downstream flows. Any changes to project operations and downstream flows would be minor. More water would be stored during the high flow period in the spring and released during dryer periods later in the year. However, summer water levels would be similar to current operations, except the reservoir would be four feet higher. The water level increase would allow the UYWCD to better utilize the project's water supply, and would increase the recreational capacity of the project reservoir by about 6 percent.

*Waiver*

The UYWCD proposes to seek a waiver from FERC to forego the draft application process, provided that resource agencies and other interested parties concur. By doing so, UYWCD hopes to streamline the project amendment process and ensure that the

proposed construction can take place in 2007, as is currently slated, followed by increasing the reservoir level in 2008. By eliminating the draft application, the UYWCD hopes to improve its efficiency and lower the cost associated with the proposed action.

Although the draft application is proposed to be omitted, there are still at least two opportunities for agencies, interested parties and private citizens to file comments concerning the proposed plan. The first opportunity is between now and October 15, 2006. These comments should be filed with UYWCD, and will be addressed in the license amendment application. The second opportunity will be initiated by FERC's issuance of a Public Notice after the application has been filed. The notice will request that comments be submitted to FERC; these comments will be addressed in FERC's Environmental Assessment (EA). Issuance of the EA offers a third opportunity for comment if issues have not been resolved at the application filing stage.

***Purpose and Need***

The primary purpose for the increased reservoir level is to ensure that a water supply is available for population growth. Additionally, the proposal will increase reservoir surface area to provide for additional recreational opportunities. The increased reservoir level will also result in an increased head (i.e., elevation difference between the reservoir surface and the tailwater at the powerplant) - leading to an increase in hydroelectric power generation by approximately six percent.

The reservoir increase will allow for the augmentation of late summer/fall base flows, which would help threatened and endangered species residing downstream. The proposed reservoir increase will also allow the Stagecoach Project to in compliance with the Colorado Water supply for the 21st Century Act, and can be included in the Yampa district's master plan to supplement well water permits in the future.

***Environmental Resources, Issues and Information Needs***

In order to receive FERC approval for a license amendment, project licensees are required to first evaluate the proposal's impact on the following project resources: 1) water use and quality; 2) fish and aquatic resources; 3) wildlife and botanical resources; 4) wetlands and riparian habitat; 5) rare, threatened and endangered species; 6) geological and soil resources; 7) recreation resources; 8) land use; 9) aesthetics; and 10) cultural resources.

Based on the UYWCD's preliminary assessment on the proposed reservoir increase, the following project resources have been identified as potentially being impacted:

- water quality issues (temperature and dissolved oxygen);
- reservoir fish and aquatic resources;
- Yampa River fish and aquatic resources downstream of the project;
- wildlife;
- wetlands;

- threatened and endangered species;
- soil erosion;
- recreation resources; and,
- wetland and riparian habitats.

*Existing Project Resources*

*Reservoir Management.* The reservoir fills in the spring, and then is drawn down between fall and early spring. Its peak storage is predicted by snow pack, and controlled by releases prior to run-off. The project's minimum flow requirements are shown below.

Minimum Flow Requirements at the Stagecoach Project:

December 1 to July 31 → 40 cfs or inflow
August 1 to November 30 → 20 cfs

*Water Quality.* Both water temperature and dissolved oxygen (DO) are monitored by two stations downstream. DO levels released at the project are required to be at least 6.0 mg/l at 1,000 feet below the dam. A goal of 4.0 mg/l or greater is maintained in the stilling basin.

Water temperature can be regulated by changes in outflow through three different gates, located at three different depths in the reservoir to provide optimum temperature for fish downstream.

*Reservoir Fish and Aquatic Resources.* Reservoir fish include rainbow trout, northern pike and white suckers. There is some spawning by rainbow trout at the project inlet in the spring and fall, while white suckers spawn at riffles or windswept shores. The project reservoir is stocked with approximately 45,000 rainbow trout annually by the Division of Wildlife.

Northern pike populations restrict the natural recruitment of other species. Management of the reservoir is aimed at reducing pike predation on trout. By waiting until the fall to stock trout, the trout released are larger in size, which deters pikes from preying on them.

*Yampa River Fish and Aquatic Resources.* A total of nine species of fish are known to populate these waters. Among them, the rainbow trout is most abundant. Spawning occurs just below the dam, with rainbow trout spawning during June and July when flows are high, and mountain whitefish spawning in October.

Downstream from the dam, there is a catch-and-release program for the first 0.6 miles. After the first 0.6 miles, there is a maximum catch limit of two fish in place.

Although there would be minor changes to project flows - decreased late spring/early summer flows, and possible flow increases at other times of the year - the project would continue to meet its minimum flow requirements at all times. The UYWCD is

coordinating with Colorado Division of Wildlife to accommodate the flow needs of spawning and wintering fish.

*Wildlife and Botanical Resources.* Habitats present at the Stagecoach Project include wetlands, aquatic habitat, sagebrush areas and meadows.

The project also includes waterfowl nesting areas. Approximately 500 elk winter in the vicinity of the project, and in the summer project lands become a concentration area for mule deer. Small game and bird hunting is allowed in-season.

The proposed increase in the reservoir level would add approximately 47 acres to the reservoir, and impact about 27 acres of upland habitat.

*Wetlands.* Approximately 20.5 acres of wetlands would be affected by the increase in reservoir level. A Section 404 Permit from the U.S. Army Corps of Engineers (USACE) would be required for the impacted wetlands. The measures used to mitigate the impact to wetlands, such as the development of new wetlands located further away from the project reservoir, would provide functions equivalent to those lost from the raised reservoir level.

There are several ponds that were originally created by UYWCD in order to mitigate the loss of wetlands caused by the construction of the project. There would be no effect on these improvements.

*Rare, Threatened and Endangered Species.* Rare, threatened and endangered species residing in the project area include the: bald eagle, greater sandhill crane, Northern leopard frog, bonytail, Colorado pikeminnow, humpback chub and razorback sucker. Other than the eagle and frog, these species are located well downstream of the project. The bald eagle and greater sandhill crane are not expected to be impacted. The Northern leopard frog, however, could be affected by the inundation of wetlands and thus, loss of habitat. Since new wetlands will be created to mitigate these losses, any impacts to the frog would be short-term. Impacts to the aforementioned fish species will be addressed during continued consultation between the UYWCD and the U.S. Fish and Wildlife Service (USFWS), pursuant to Section 7 of the Endangered Species Act.

*Geological and Soil Resources.* The project reservoir is part of the Brown Park formation and consists mostly of sandstone. A seismicity study for the dam design has been previously conducted. No effects on geological resources are anticipated.

Minor soil erosion from wave action is expected to result from the proposed reservoir increase. This erosion would be temporary and would stabilize over time.

*Recreation Resources.* The Stagecoach State Park is located within the Stagecoach Project boundary. This land is owned by UYWCD, but is leased to the Colorado State Parks (CSP) to operate and maintain the Stagecoach State Park. Recreational activities at

the park include camping, boating, fishing, hiking, swimming, water skiing, sailing, etc. In 2005, the park recorded having 162,500 visitors.

The proposed increase in reservoir level would cause a six percent increase in reservoir surface area. This surface area increase would increase the recreational capacity of the reservoir. However, it would also "potentially" inundate the following Stagecoach Park facilities: 1) boat ramps; 2) a portion of the wildlife observation area; 3) swim beach; 4) hiking trail; 5) restroom storage vaults; 6) concrete picnic pad; and 7) trees and irrigation systems. The UYWCD will work with CSP to ensure that all impacts to recreational resources are mitigated.

*Land Use*. As mentioned above, the lands surrounding the project reservoir on which the Stagecoach State Park is located are owned by the UYWCD and leased to CSP. This land is zoned "OR," for Outdoor Recreation.[1] Other land uses include dryland pasture for livestock grazing, a residential area south of the reservoir, a wastewater treatment plant and wetlands habitat preserve. No acquisition of land would be needed to implement the proposed reservoir increase.

*Aesthetic Resources*. The Stagecoach Project area is notable for its scenic quality and value. The increase in reservoir level would not cause any changes to this scenic quality - the dam modification would only be visible immediately downstream; high water levels would continue during the warm months for both aesthetic and recreational purposes.

*Cultural Resources.* A class III cultural resources survey of the project area was conducted in 1984. The survey revealed the presence of three prehistoric and 11 historic sites. None of these sites were eligible for listing on the National Register of Historic Places; therefore, the increased reservoir level will have no impact on cultural resources.[2]

## III. Discussion

### *Recreation Resources Mitigation*

Ms. Arlene Porteus of the Yampa Town Board expressed concern with how and when the Stagecoach State Park's recreational resources would be mitigated. She emphasized that these resources were the product of numerous volunteer efforts and were constructed over a long period of time. She asked if the same efforts would be required to return these resources to the condition they are currently in after the reservoir level is increased. In response to these concerns, Mr. John Fetcher of UYWCD assured the participants that the UYWCD would fully mitigate all recreation resources, and, in doing so, would not rely on volunteers to carry-out the mitigation measures. Mr. John Fetcher also emphasized that the impacted recreation resources would be relocated, or otherwise mitigated, within a reasonable time period.

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[1] Mary Alice Page-Allen of Routt County Planning. August 16, 2006.

[2] In a letter dated August 2, 2006, the Colorado Historical Society stated that no historic properties would be affected.

*Costs*

A participant suggested that CSP should be responsible for paying for the recreation mitigation. Mr. John Fetcher responded that the UYWCD would be the responsible entity for funding the recreation mitigation as it was the UYWCD that was constructing the spillway raise.

In response to who would pay for the spillway modifications and other project-associated costs, a UYWCD spokesperson stated that the UYWCD has financial reserves slated to be used for the project. Therefore, the local citizens would not be required to fund the project through a tax increase.

Similarly, a participant asked what the impact on an average individual from the Yampa area would be. The UYWCD's John Fetcher stated that because no additional taxes would be used for this proposal, the only effect on the average citizen would be the impact to recreational resources at the Stagecoach State Park, which would be mitigated.

The participant also asked if water from the Stagecoach Project could be marketed to developers and other potential users. UYWCD's John Fetcher indicated that there is a chance that the additional water storage could be sold at a future date, but this action would have to be further investigated.

***Timeline for Project Approval and Implementation***

Ms. Alexis DeLaCruz of the *Steamboat Pilot & Today* newspaper asked if a schedule had been developed for the anticipated proposal approval and implementation.

The UYWCD stated that, pursuant to the agency and public meetings held today, UYWCD will be accepting comments until October 16, 2006. These comments will be included in UYWCD's license amendment application, which is scheduled to be submitted to FERC in the fall 2006. The UYWCD expects that the Federal Energy Regulatory Commission will act on the amendment application in late winter 2007, thereby allowing construction to commence in 2007. The UYWCD plans to increase the reservoir level during spring 2008, assuming sufficient runoff is available.

***Angling***

Ms. Arlene Porteus of the Yampa Town Board inquired about the impact of the proposal on ice fishing and spring fishing with ice-off conditions. The UYWCD does not believe that the increased reservoir level will impact ice fishing or spring fishing with ice-off conditions. If these recreational opportunities are affected, CSP will adjust access to the reservoir accordingly.

*Frazil Ice*

A participant asked about the proposal's impact on the formation of frazil ice downstream in the Yampa River, and the resulting downstream fog that often becomes trapped in the valley. Water released from the reservoir is relatively warm and no frazil ice issues have existed downstream to Catamount Reservoir since Stagecoach began operating. The reservoir capacity increase will not affect frazil ice formation, since water temperatures from reservoir discharges will be similar to existing conditions.

*Float Fishermen*

A participant asked whether or not there would still be enough clearance under an existing bridge for float fishermen to pass underneath after the reservoir level is increased four feet. At this time, the UYWCD believes that after the reservoir level is increased, there will not be sufficient clearance for float fishermen to pass under the bridge.

*Potential Flooding of County Road*

A participant inquired if the county road south of the reservoir would be inundated as a result of the proposed reservoir increase. UYWCD has consulted with engineers to assess the potential impact to the county road. Due to the elevation of the road and the large rock base of the road, no impacts are anticipated.

## IV. Action Items

UYWCD will address the public's concerns and issues, as discussed above, in the license amendment application. UYWCD requests that all additional comments be submitted by October 15, 2006, in order to be included in the license amendment application. UYWCD plans to file the license amendment application with FERC in fall 2006. UYWCD will also apply for a Clean Water Act Section 404 permit with the U.S. Army Corps of Engineers (USACE) and a Section 401 permit with the Colorado Division of Water Resources (CDWR). Pursuant to the filing of the FERC application, FERC will issue a Public Notice soliciting comments, protests and protests in opposition. Additionally, the USACE will also solicit public and agency comments.

The proposed implementation schedule would not interfere with the prime summer recreation season. If the application is approved early in 2007, construction would commence in late summer/early fall 2007. All construction is scheduled to be completed by 2007, and the reservoir level would be filled to its new level in 2008.

In response to a question by an UYWCD representative, the participants agreed that the project would be beneficial.

# Upper Yampa Water Conservancy District

September 20, 2006

**Subject:** **FERC Project No. 9202**
**Stagecoach Reservoir Capacity Increase**
**Draft Joint Meeting Notes, Approach to Issue Resolution, and Request for Waiver from Draft Application**

Dear Joint Meeting Participant:

Thank you for taking the time to participate in the Joint meetings held on August 16, 2006 to discuss the four-foot Stagecoach spillway raise and associated reservoir capacity increase. We appreciate the thoughtful comments and issues that you raised during the meetings. We have prepared draft meeting minutes for your review and comment (see enclosure). We ask that you provide any edits to the Upper Yampa Water Conservancy District (District) by the October 15, 2006 due date for comments on the Initial Information Report (IIR). We will then revise the minutes and reissue them as final.

Over the past month, we have discussed the items raised during the Joint meetings with our consultants and agencies. As presented in Attachment 1, we have addressed most issues. For a couple of issues, we have presented preliminary results and a proposed approach. Please review our responses to the issues raised, and let us know if you concur with our assessments and approaches. We propose to contact you prior to the October 15th due date for comments on the Initial Information Report to discuss any further thoughts that you may have.

Assuming you concur with the analytical approaches and results, we ask that in your transmittal letter to the District that you comment on the acceptability of a waiver request to FERC to forego the draft amendment application. As we mentioned in the Joint meeting, you will have the opportunity to provide comments after filing of the final application, and after FERC prepares a draft environmental assessment, should FERC determine that a draft is necessary. The District will formally request waiver from the draft amendment application from FERC after receipt of your letters.

We look forward to your comments on the IIR, the meeting summaries, and our approach to issue resolution. Please contact me at 970/879-2424 if you have any questions.

John R Fetcher, Secretary
Upper Yampa Water Conservation District


Mailing Address
P.O. Box 880339
Steamboat Springs, CO 80488-0339

Location
Fish Creek Filtration Plant
3310 Clear Water Trail

Telephone
(970) 879-2424
Fax (970) 879-8169

**UPPER YAMPA WATER CONSERVANCY DISTRICT**
**STAGECOACH HYDROPOWER – LICENCE AMENDMENT**
**FERC PROJECT NUMBER 9202**

**MEETING BETWEEN AGENCIES AND UYWCD**
**AUGUST 16, 2006**

## MEETING AGENDA

1. Introduction and Welcome
2. FERC License Amendment Process
3. Stagecoach Project History
4. Description of Existing Facilities and Proposed Project
5. Purpose and Need
6. Environmental Resources, Issues and Information Needs
7. Conclusion and Wrap-up

Check scope of S. to PUD → 711 total 47 more acres (South Shore, B. Stahl)

4' - impacts to adj lots → acquisition?

33.5 upland habitat
12.5 wetlands

Kent says 20.49 wetlands