13

LARAMIE COUNTY CLERK
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM PROCESSING FORM

1. DATE OF PROPOSED ACTION: May 1, 2012

2. AGENDA ITEM:

- [ ] Appointments
- [ ] Bids/Purchases
- [ ] Claims
- [x] Contracts/Agreements/Leases
- [ ] Grants
- [ ] Land Use: Variances/Board App/Plats
- [ ] Proclamations
- [ ] Public Hearings/Rules & Reg's
- [ ] Reports & Public Petitions
- [ ] Resolutions
- [ ] Other

3. DEPARTMENT: Planning and Development

APPLICANT: Laramie County **AGENT:** Kranse

4. DESCRIPTION: Consideration of a
RESOLUTION AMENDING THE BUDGET AMOUNT FOR EXISTING PROFESSIONAL SERVICES AGREEMENTS REGARDING THE AVAILABILITY AND DEVELOPMENT OF WATER RESOURCES HELD BY THE UNITED STATES BUREAU OF RECLAMATION AT FLAMING GORGE RESERVOIR FROM $20,000 TO $30,000

RECEIVED AND APPROVED AS TO FORM ONLY BY THE LARAMIE COUNTY ATTORNEY

Amount $10,000(NEW) From 232-10-1017-4051480: Nuisance/Community Cleanup budget line

5. DOCUMENTATION: 2 Originals 4 Copies

2nd original Planning 5-3-12

Clerks Use Only:

Commissioner		Signatures	
Humphrey	_____	Co Attny	_____
Knudson	_____	Assist Co Attny	_____
Ketcham	_____	Grants Manager	_____
Action	_____	Outside Agency	_____

RESOLUTION #120501-13

"RESOLUTION AMENDING THE BUDGET AMOUNT FOR EXISTING PROFESSIONAL SERVICES AGREEMENTS REGARDING THE AVAILABILITY AND DEVELOPMENT OF WATER RESOURCES HELD BY THE UNITED STATES BUREAU OF RECLAMATION AT FLAMING GORGE RESERVOIR FROM $20,000 TO $30,000"

WHEREAS, Wyoming obligates and authorizes the Laramie County Commissioners to take action regarding the property and funds of the County to promote the public health, safety, morals and general welfare of the citizens of Laramie County; and

WHEREAS, The development of water resources is a critical need for Laramie County and all options for additional water resources which may become available for use in Laramie County should be explored and reviewed; and

WHEREAS, The Laramie County has entered into agreements as a coalition member with several governmental entities to effectively fund and carry forward the studies and work required to fully investigate the availability of future water resources from the Flaming Gorge Reservoir; and

WHEREAS, the total cost of the work being performed has increased, requiring additional funding from the coalition members.

IT IS THEREFORE RESOLVED by the governing body of Laramie County, Wyoming, in concert with other participating governmental entities, agrees to amend the participation amount for completion of the studies by professional service providers currently under contract to determine the availability and development of water resources being stored by the United States Bureau of Reclamation in the Flaming Gorge reservoir. Laramie County agrees to amend the total dollar participation to a total not to exceed $30,000, $20,000 of which has already been paid. The additional $10,000 in funds for this amendment shall be from the 232-10-1017-4051480: Nuisance/Community Cleanup budget line.

PRESENTED, READ AND ADOPTED this 1st day of May, 2012.

BOARD OF LARAMIE COUNTY COMMISSIONERS

Gay Woodhouse, Chairman

ATTEST:

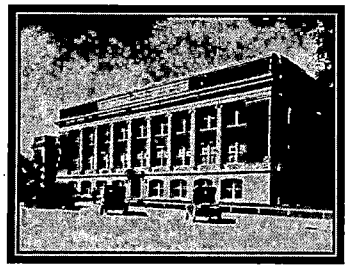
Debra K. Lathrop, Laramie County Clerk

Reviewed and approved as to form:

Mark T. Voss, Laramie County Attorney

COPY OF RECORD

Historic County Courthouse



LARAMIE COUNTY
PLANNING AND DEVELOPMENT OFFICE

Planning • Zoning • Building Permit • Mapping

MEMORANDUM

TO: **Board of Laramie County Commissioners**

FROM: **Gary Kranse, Planning and Development Director**

DATE: **March 2, 2010**

TITLE: **Resolution amending the budget amount for existing Professional Services Agreements Regarding the Availability and Development of Water Resources Held by the United States Bureau of Reclamation at Flaming Gorge Reservoir from $20,000 to $30,000**

EXECUTIVE SUMMARY

In March of 2010, Laramie County became a founding partner in the coalition of regional governmental agencies considering the potential benefits and feasibility of pursuing a water supply development project to divert approximately water from the Green River Basin to water users within Wyoming and Colorado. The coalition recognizes that growth, development, and demand occurring in the lower Colorado River Basin States necessitates action and efforts to secure Wyoming's and Colorado's entitlements under the Colorado River Compact. Laramie County continues to recognize the importance of facilitating and supporting efforts to investigate entitlements under the Colorado River Compact.

The study in ongoing and nearing completion. The coalition expects to have the final report completed in early fall this year. The extent of the work has provided significant insight to the overall feasibility of the project. The original budget for the project did not account for additional necessary timing and efforts needed for final completion. At the time of the projects cost of the study, there were several unknowns. There is remaining work needed to complete the study. The total cost of the additional work is estimated at $80,000. This cost would be divided between the coalition members for a total increase in financial participation of $10,000 by each member for a total dollar participation from each coalition member of $30,000. Staff supports the increase in financial participation. Funding for this increase can be accommodated from the 232-10-1017-4051480: Nuisance/Community Cleanup line item. A total of $25,000 was allocated to this line item, of which $6,000 has been expended, leaving $19,000 total available dollars. Staff recommends that the additional $10,000 for this budget increase be expended form this account and line item.

310 West 19th Street • Suite 400 • Cheyenne, Wyoming 82001
(307) 633-4303 Fax (307) 633-4519
planning@laramiecounty.com

PROPOSED MOTION

I move to approve the resolution to amend the budget amount for existing Professional Services Agreements Regarding the Availability and Development of Water Resources Held by the United States Bureau of Reclamation at Flaming Gorge Reservoir from $20,000 to $30,000 and to fund this amendment from the 232-10-1017-4051480: Nuisance/Community Cleanup budget line.

ATTACHMENTS

1. **Resolution**

Colorado-Wyoming Coalition

Flaming Gorge Investigation

Status Report

March, 2012

Background

The Colorado/Wyoming Coalition was formed in early 2010 and have embarked upon a Feasibility Investigation with the U.S. Bureau of Reclamation Upper Colorado Regional Office (BUREC). The BUREC has been modeling available water supplies from Flaming Gorge for nearly two years. This study is being conducted simultaneously with the BUREC's Colorado River Basin Water Supply and Demand Study. Preliminary results from the Flaming Gorge model are expected in the Spring of 2012.

The Coalition

The Coalition is a first-of-its-kind joint collaboration formed to study the feasibility of a major water supply project that could benefit Front Range communities in both states. The Coalition is comprised of the following entities:

Colorado	**Location**	**Population Served**
Pikes Peak Regional Water Authority	El Paso County, CO	30,000
Douglas County Colorado	South Metro Denver	45,000
Parker Water and Sanitation Dist	South Metro Denver	125,000
South Metro Water Supply Authority	South Metro Denver	190,000
Town of Castle Rock, CO	South Metro Denver	85,000
Wyoming		
City of Cheyenne	SE Wyoming	69,000
City of Torrington	SE Wyoming	5,000
Laramie County, WY	SE Wyoming	20,000
Total Population Served		**569,000**

Water Demand

All the above participants have filled-out questionnaires to address the following issues:

- Buildout Dates
- Total future water demand to 2070
- Flaming Gorge Reservoir Demand and Timing of Need
- Facilities available for use
- Water delivery schedules
- Water reuse and conservation
- Water rates

Based upon the input received from all participants, the total Flaming Gorge Demand to year 2070 is 105,000 acre-feet.

Wyoming West Slope Meetings

Numerous meetings have been held on Wyoming's west slope over the past 4 years to keep local interests up-dated on the Coalition's progress. The most recent meetings were held in Rock Springs during the Spring of 2011 with the Communities Protecting the Green River. Though the west slope interests are not necessarily supportive of the Coalition's study, they have been appreciative of the efforts made to keep them informed of the study's progress.

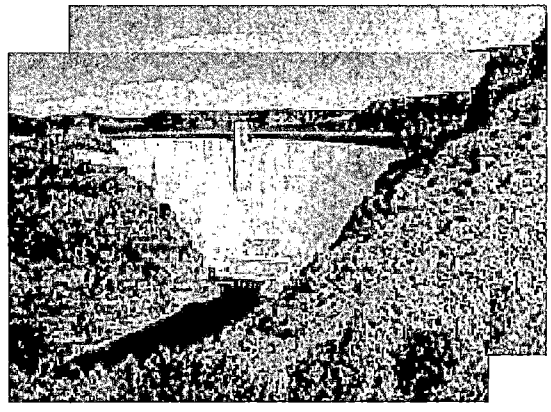
Current Status

Coalition consultants have been awaiting BUREC modeling results for some time. Based upon recent conversations with BUREC personnel, the Flaming Gorge available storage modeling should be completed in early 2012. Once modeling results are available, consultants will begin to finalize the feasibility components of a potential Flaming Gorge water supply. Given this schedule, it is hoped that the final feasibility study will be completed by July, 2012.

Contact: Malcolm Wilson, (801) 524-3709
Heather Hermansen, (801) 524-3883

Flaming Gorge—Green River Research Model (FG-GRRM)

Reclamation Model Development Team, Upper Colorado Region



FG-GRRM is being developed to define current and future water availability in the Upper Green River Basin based on current operating criteria, and assess future impacts of water development in the Upper Colorado Region from Fontenelle to Lake Powell. (http://www.usbr.gov/uc/envdocs/eis/fgFEIS/index.html)

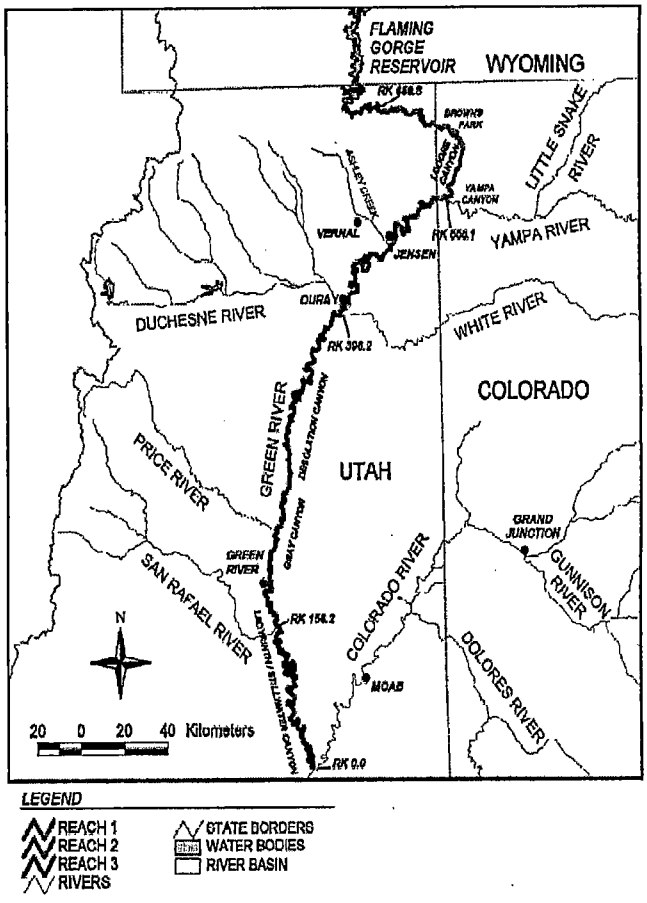
Model development process parellels Colorado River Basin Water Supply & Demand Study (Basin Study) (http://www.usbr.gov/lc/region/programs/crbstudy.html)

Basin Study updated timeline for Interim Report #3 to be published in March 2012.

FG-GRRM preliminary model results expected November 2011 - February 2012, based on publication of Basin Study results.

Key Operational Guidelines:

- Flaming Gorge Dam and Reservoir (FG) operating under a Record of Decision on the Operation of Flaming Gorge Dam Final Environmental Impact Statement signed on February 16, 2006 (ROD).
- The purpose of the ROD is to operate FG to protect and assist in recovery of the populations and designated critical habitat of four endangered fish as defined by the 1973 Endangered Species Act, while maintaining all authorized purposes under the Colorado River Storage Project Act.
- The Upper Colorado River Endangered Fish Recovery Program issued Flow and temperature Recommendations for Endangered Fishes in the Green River Downstream of Flaming Gorge Dam in September 2000 (Flow Recommendations). The ROD implements, to the extent possible, operations that are consistent with the Flow Recommendations.



- The Flow Recommendations divide the Green River below Flaming Gorge Dam into three distinct Reaches. See figure below.
  - Reach 1: Flaming Gorge Dam to Yampa River Confluence
  - Reach 2: Yampa River Confluence to White River confluence
  - Reach 3: White River confluence to confluence of Green and Colorado Rivers
- Flaming Gorge operating criteria based on five hydrologic classifications: wet, moderately wet, average, moderately dry and dry.
- Reclamation attempts to meet flow criteria outlined in the Flow Recommendations for Reach 1 measured at Flaming Gorge and Reach 2 measured at the Green River at Jensen, Utah USGS stream gage. Flow targets measured for Reach 2 are based on daily operations, especially during the spring runoff season.
- Spring operations are timed to coincide with the peak and immediate post-peak of the Yampa River spring runoff. The Yampa River historically peaks in late May. Base flows begin after spring runoff (between June-July) and continue through the end of February.

Key Modeling Assumptions:

- ROD operational criteria outlined above are implemented as rule-based logic within the model.
- The model creates a daily Yampa River hydrograph during the April-July period in order to accurately assess whether Reach 2 Flow Recommendation targets are being met.
- FG-GRRM inputs that are directly tied to the Basin Study process include:
  - Rule-based logic implementation is the same for consistency among Reclamation monthly models.
  - Natural flows based on historic records, tree-ring reconstructions and climate change studies.
  - Wyoming, Colorado and Utah current and future water depletions and demands are coarsely disaggregated and spatially distributed in the model. This effort is directly tied to the Basin Study process.

Dear Water Leaders,

A great deal has happened in Colorado water policy since the Colorado and Wyoming Coalition announced its formation and the Flaming Gorge Reservoir project feasibility study was initiated in March 2010. Enclosed is a progress report.

For water providers who have a responsibility to address water supply over the next fifty years and beyond, the good news is that water policy in Colorado has begun to set a course for action. The Colorado members of the Coalition who represent more than 400,000 water users strongly believe that long-waited progress should not be stalled or derailed.

We support the key positions Governor Hickenlooper, his administration and the state's water stakeholders have adopted:

- Protecting agricultural water is a top goal
- Providing an adequate and reliable supply of water is necessary for a strong economy
- Endorsing SWSI 2010 study findings detailing a significant gap between supply and demand that can't be met by conservation alone
- Supporting a portfolio of strategies in Colorado, which include reuse, conservation, completing identified projects and developing new projects

We believe that insisting on an honest and fair-minded examination of new projects is essential to address the long-term water shortfall in Colorado. That is why the Colorado/Wyoming Coalition wants to complete a feasibility study, provide information as we progress, and engage in discussions not only with likely supporters, but also early skeptics and opponents.

While we are encouraged that the Flaming Gorge discussion sponsored by the roundtables and State of Colorado will attempt to foster agreement on key issues and take a fair look at the project, we are concerned that many groups are engaging in a political attempt to intimidate the participants and bias or terminate the process. If they are successful, they will undermine the principles that the roundtables, Interbasin Compact Committee and the administration have articulated. More importantly, they will deny Coloradans an opportunity to address the significant water challenge they face without one possible solution – new water. It will also handicap Colorado in its quest to use its legal and rightful share of Colorado River water.

I can assure you the Colorado/Wyoming Coalition is committed to objectively examining the feasibility of this project. It has already invested significant resources to assemble the Coalition of providers and complete component studies that are a part of the final feasibility study.

We look forward to continuing to work with the State of Colorado, the IBCC and the roundtables who have shown an interest in examining the project.

If you have any questions or comments, please e-mail (fjaeger@pwsd.org) or call me, 303-841-4627.

Sincerely,

Frank Jaeger

MEMORANDUM

RE: Update on Flaming Gorge Project

FROM: Frank Jaeger
Parker Water and Sanitation District

DATE: January 16, 2012

It was clear from the presentations at the recent Colorado River Water Users Association Conference that lower basin states have put in place agreements and projects to allocate and use their full compact entitlement. I remain concerned that Colorado continues to study and discuss its full legal share of the Colorado River, but fails to plan and develop projects that could safeguard it.

Fortunately, local water agencies are making progress on projects with significant storage and supply elements. This March, we will celebrate the completion of Rueter-Hess Reservoir, a regional project that will initially be used by four Douglas County water agencies. Major projects sponsored by consortiums of water groups, with leadership from Colorado Springs Utilities, Northern Water, Denver Water and Aurora Water, are in various stages of planning, permitting and construction. But, these projects do not address Colorado's interest in its remaining Colorado River allocation.

Last August I wrote you concerning the need for the State of Colorado and the Colorado Water Conservation Board (CWCB) to address the scientifically established gap in water supplies in our basins. I strongly supported the state's balanced approach, which includes conservation, reuse, water-sharing with agriculture, projects in the planning process and new projects.

As you all know, the CWCB, in the face of a high-profile, professionally orchestrated lobbying campaign, kept its promise to consider all options, including new projects that have some level of support and appear worth examining.

I believe the Flaming Gorge project, to which the state allocated a small amount for initial consideration, is one of those projects. The project is a bi-state effort that provides an approach for allowing two upper basin states to develop a portion of our compact entitlement in a collaborative fashion. A series of municipalities, counties and local water providers in Colorado and Wyoming have been investigating the feasibility of the project for more than two years. As the attached report indicates, I believe we are nearing the conclusion. The final task is to integrate the U.S. Bureau of Reclamation's water availability analysis into our model.

I will keep you informed of our progress. Obviously, a project of this magnitude will require the involvement of both states and a considerable amount of conversation with water stakeholders.

If you have any questions or comments, please e-mail (fjaeger@pwsd.org) or call me at 303-841-4627.

Basin Roundtable Project Exploration Committee: Flaming Gorge
March 27, 2012
Meeting Agenda

Location: Hotel Denver in Glenwood Springs

Objectives

- Gain better understanding of State efforts related to water availability and risk
- Gain better understanding of Compact entitlement, compliance, and associated issues
- Learn about two proposed Flaming Gorge projects
- Review roundtable suggestions and revise the preliminary list of interests and issues
- Agree on informational needs for next meeting

Agenda

11:00 am	**Introductions and Agenda Review**
11:20 am	**Public Comment**
11:30 am	**State of Colorado Efforts (Eric Hecox CWCB)** • Presentation: State efforts to answer key questions related to water supply availability, risk, portfolios, etc. and how they all "fit together" • Questions/answers and discussion
12:15 pm	**Break to Get Lunch**
12:30 pm	**Perspectives on Compact Entitlement, Compact Compliance, and Associated Risks and Issues** • Presentation from Jennifer Gimbel (CWCB) followed by questions/answers • Presentation from Eric Kuhn (CRWCD) followed by questions/answers • Discussion
2:00 pm	**Project Proponent Presentation: Colorado Wyoming Coalition** • Presentation (30 minutes) • Questions/answers (30 minutes)
3:00 pm	**Break**
3:15 pm	**Project Proponent Presentation: Wyco Power and Water**
4:15 pm	**Next Steps** • **Review comments on preliminary list of interests and issues, agree on revisions to the list, and determine next steps for the list** • **Agree on agenda items for April Committee meeting**
4:50 pm	**Public Comment**
5:00 pm	**Adjourn**

Wyo. pipeline plan fails to get initial permit

By Bruce Finley *The Denver Post*

Conservationists are casting a project to pipe water from Wyoming to Colorado as dead after federal authorities Thursday nixed an entrepreneur's pitch for a preliminary permit.

"The Flaming Gorge Pipeline is a zombie. It's just staggering around looking for anything to latch onto to keep it alive," said Stacy Tellinghuisen, a Western Resources Advocates energy policy analyst.

But entrepreneur Aaron Million said he's undaunted and soliciting bids after investing millions in planning the pipeline. He'll submit new engineering and pipeline details within two weeks.

And Parker water manager Frank Jaeger is moving ahead with a rival project to divert water from Wyoming. Jaeger said he has 19 water utilities committed — mostly in southern suburbs dependent on depleted underground aquifers.

WATER » 3B

WATER: Plan application lacks data, called "premature"

« FROM 1B

State natural resources planners also are exploring possibilities for diverting unallocated water from Wyoming and have planned a forum featuring Million and Jaeger.

If Colorado's population continues to grow, the state could be short 1 million acre-feet of water per year by 2050.

The conservation and sportsmen groups applauding Thursday's federal decision had few ideas for resolving the projected water deficit beyond more conservation.

Growth control is one possibility, said Zeke Hersh, owner of Blue River Anglers in Frisco, part of a recreation-oriented business coalition opposed to a permit for Million's project. "Growth's great, but we need jobs. People come here for a reason, and if there's no water in rivers, people aren't going to be coming here."

Federal Energy Regulatory Commission members said they rejected Million's permit application because it was premature. A letter from the commission's energy projects director, Jeff Wright, said "there is no purpose" for issuing a hydropower permit without information on pipeline operations that Million could not provide.

Million first applied for a permit from the U.S. Army Corps of Engineers. It halted its review after seeking greater detail.

The project would pump about 200,000 acre-feet of water a year through a 501-mile pipeline from the Flaming Gorge Reservoir in southwestern Wyoming to Colorado's semi-arid Front Range. Million said the water would generate electricity at power stations. The water would be stored in a series of new and expanded reservoirs from Fort Collins to Pueblo — for use by people and to irrigate crops.

Conservationists have campaigned about the project because it would remove water from the upper Colorado River Basin — water that otherwise becomes the Green River — hurting ecosystems that support fish, wildlife and people.

"FERC recognized this is not about hydro-energy. This is essentially a water grab and, to build a water pipeline of this magnitude, other agencies need to weigh in first," Earthjustice attorney McCrystie Adams said. Pumping the water "was going to use way more energy than it would have produced, and it would have devastated the Green River."

Meanwhile, Jaeger, manager of the Parker Water and Sanitation District, has enlisted 19 public water providers in Cheyenne, Castle Rock, Parker and elsewhere around south metro Denver who have committed to buy 105,000 acre-feet of diverted water.

Jaeger said he'll complete a full investigation before applying for permits. "Conservation is not the solution," he said. "Conservation is a management tool."

A state task force, launched last year using funding from the Colorado Water Conservation Board, is exploring water diversions from Wyoming despite opposition from Wyoming's governor. Task force leaders invited Million and Jaeger to discuss their ideas March 27.

"FERC's action does not affect Colorado's plans, which at this stage are simply to learn more about the project proposal as part of our ongoing conversation about addressing the challenge of meeting the state's long-term water needs," state natural resources spokesman Todd Hartman said.

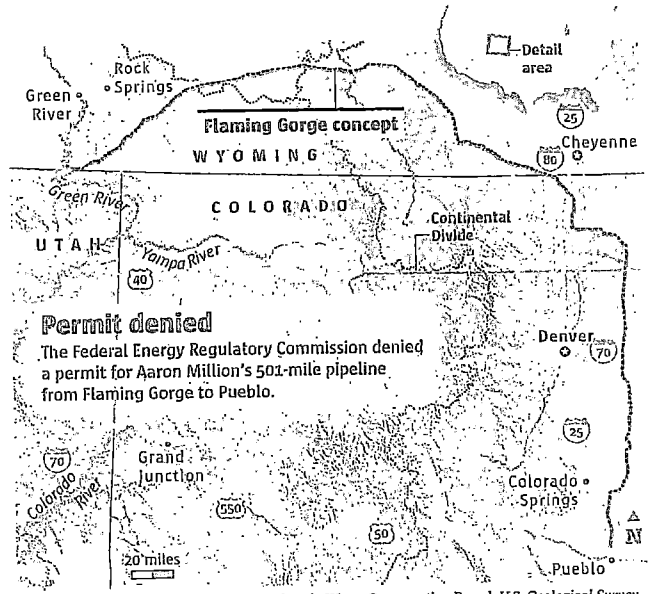
"A mix of solutions will need to be considered to address the state's future needs," Hartman said. "Those strategies include conservation, agricultural transfers, smaller regional projects and development of new supplies."

Bruce Finley: 303-954-1700, twitter.com/finleybruce or bfinley@denverpost.com

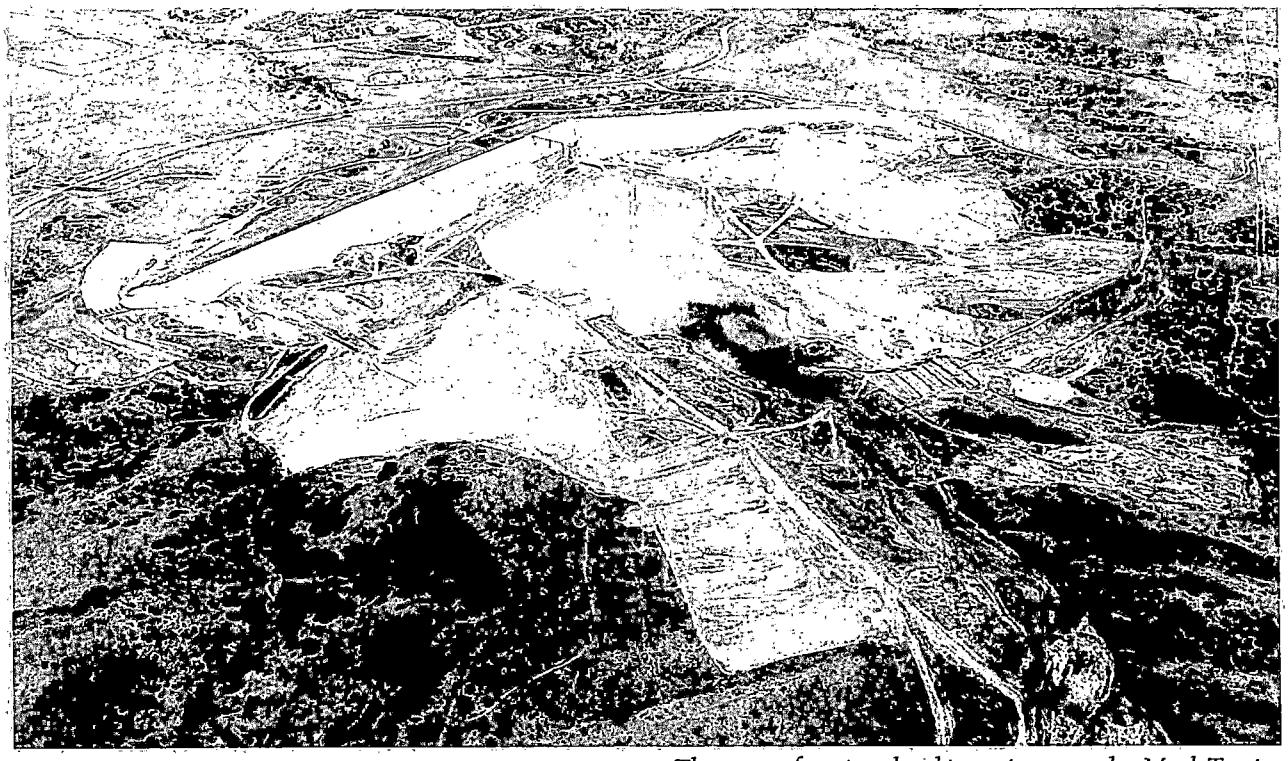
Water consumption on the decline

A 2011 analysis by the Pacific Institute shows customers of 17 water providers cut their per-capita, per-day water consumption, in gallons, between 1990 and 2008. Statewide, the rate declined 22 percent to 167 gallons from 214.

Provider	Gallons used in 1990	Gallons used in 2008	% change
Denver Water	238	171	-28
Colorado Springs	202	180	-11
Aurora Water	158	137	-13
Pueblo	239	232	-3
Grand Junction	NA	178	NA
Thorton	159	154	-3
Fort Collins-Loveland	265	153	-33
Westminster	156	146	-6
Greeley	263	153	-42
Boulder	185	147	-20
Arvada	156	154	-1
Longmont	219	178	-19
Broomfield	177	179	+1
Montrose	216	187	-13
Commerce City	242	206	-15
Golden	NA	181	NA
Durango	276	210	-24



Sources: U.S. Army Corps of Engineers; Colorado Water Conservation Board; U.S. Geological Survey
The Denver Post



The secret of getting ahead is getting started. –Mark Twain

Rueter-Hess Reservoir Completion Ceremony

Program Agenda

Welcome	Mary Spencer, PWSD Board President
History of Project	Frank Jaeger, PWSD Manager
Recognition of Partners	
State of Colorado Presentation	
Colorado State Legislature Proclamation	
Douglas County Proclamation	
Recognition of Design and Construction Team	
Recognition of Sponsors	
Board of Parker Water & Sanitation District Begins Fill	

Visit www.pwsd.org for more information and pictures of Rueter-Hess Reservoir

Sponsors

Hayes, Phillips, Hoffmann & Carberry, P.C.

Lytle Water Solutions

States West Water Resources Corporation

Dewberry

Weaver Construction Management, Inc

RJH Consultants, Inc.

Krassa & Miller, LLC

Halepaska & Associates

Ciruli Associates

9NEWS.com
COLORADO'S NEWS LEADER

Construction on Reuter-Hess Reservoir finished

5:55 PM, Mar 21, 2012 | comments

Written by
Christina Dickinson

FILED UNDER

Local News
News

DOUGLAS COUNTY - Officials celebrated the end of construction on the Rueter-Hess Reservoir on Wednesday.

A federal permit granted in 2008 allowed the reservoir to expand to 72,000 acre-feet for the original 16,000 acre-feet. There is 2,000 acres of open space which may be developed for fishing, hiking, cycling and non-motorized boating after planning and funding.

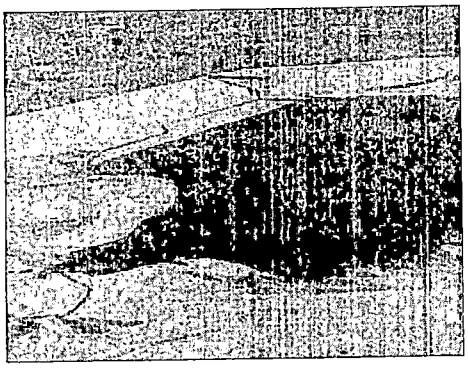
The reservoir serves the Parker Water Sanitation District area along with Castle Rock, Castle Pines and Stonegate.

"The project is a significant accomplishment for Parker Water and Sanitation District, its customers and the entire south metropolitan area. Congratulations is due all around," Frank Jaeger, PWSD district manager, said.

LOCAL

Reservoir Brings New Water Supply To Douglas County

March 22, 2012 7:01 PM



Copter4 flew over the Rueter-Hess Reservoir in Douglas County. (credit: CBS)

DOUGLAS COUNTY, Colo. (CBS4)- Parts of Douglas County have a new water supply for the future thanks to a new reservoir.

The Rueter-Hess Reservoir is located southwest of Parker. It will hold 72,000 acre feet of water.

The Rueter-Hess is 50 percent larger than the Cherry Creek Reservoir. That's enough to supply 180,000 homes with water for a year.

Filed Under

Business, Local, News, Syndicated Local

Related Tags

Castle Rock, Douglas County, Frank Jaeger, Parker, Parker Water And Sanitation District, Rueter-Hess Reservoir

"Having a permanent water supply that will go into the future is extremely important to economic growth and development, not just for new homes but for businesses. In order for business to survive you need new homes," said Parker Water & Sanitation District spokesman Frank Jaeger.

The Parker Water and Sanitation District hosted a completion ceremony at the top of the dam on Wednesday.

MORE FROM CBS

2 Popular Columnists Among Surprise Layoffs At Denver Post

Colorado Internment Camp Gets $240K To Return Barrack

Waterton Canyon Closed For Recreation Once Again

FROM AROUND THE WEB

Drunk Woman Hands Over Car Keys to Boyfriend &... (The Stir By CafeMom)

Hiker Left for Dead on Mount Everest (Reader's Digest)

Pelosi's Daughter Enrages Left with Welfare Video (Newsmax.com)

SEND CBS4 A NEWS TIP

From the Denver Business Journal:
http://www.bizjournals.com/denver/news/2012/03/21/parker-finishes-reservoir-27-years.html

Parker finishes reservoir, 27 years after project began

Denver Business Journal by Cathy Proctor, Reporter

Date: Wednesday, March 21, 2012, 6:06pm MDT

Related:

Environment, Energy, Public sector

Cathy Proctor
Reporter - *Denver Business Journal*
Email | Facebook | Twitter | Earth & Energy blog

Nearly 27 years after Parker Water and Sanitation District started building a reservoir to serve its customers, the $160 million Rueter-Hess Reservoir is complete.

"It's been a long time coming, but like anything else, you don't set goals, you define a need and set goals to reach that need," said Frank Jaeger, the district manager. Jaeger has been with the suburban water district for 31 years and started working on the reservoir project on Dec. 31, 1985.

The reservoir can hold 72,000 acre feet of water, enough to serve the needs of 144,000 customers for a year. About 61,000 acre feet of the reservoir's capacity belongs to Parker, with the remaining 11,000 acre feet of capacity owned by the district's three partners in the project: the Town of Castle Rock, the Castle Pines North Metropolitan District and the Stonegate Village Metropolitan District.

When full, the 72,000 acre-foot reservoir will have a surface size of 1,140 acres — 50 percent larger than Cherry Creek Reservoir. The reservoir is about three miles southwest of Parker on Newlin Gulch, and has a diversion structure on Cherry Creek to capture available water flows.

Construction took eight years and will fill upon receipt of the final state of Colorado dam safety inspection, according to the district.

Jaeger said the reservoir might fill in three years — if they're wet years.

At that time, the district expects to be finished on its next major project: a $55 million water treatment plant with a capacity to treat 10 million gallons per day. The district has

16,000 customer accounts and serves about 45,000 people in Parker and unincorporated Douglas County, Jaeger said. "We finished Rueter-Hess on time, on budget, with no loss-of-time accidents and no claims," Jaeger said.

"This is a huge, huge day. But it's not the end all, be all. You have to keep moving forward and our next step is the $55 million treatment plant. Parker can't rest on our laurels."

The four partner districts in the reservoir project currently rely almost entirely — on groundwater pumped from the Denver Basin aquifer. Recent studies show that underground aquifers are being depleted at a rate of about 30 feet per year, according to the district.

The reservoir partners currently rely almost entirely on non-renewable groundwater from Denver Basin aquifers. Recent studies show that underground aquifers are being depleted at a rate of about 30 feet per year.

The new Rueter-Hess Reservoir is expected to reduce the partners' reliance on groundwater by storing water, when it's available in wet years, for use in dry years and during peak summer usage, according to the district.

The district also is looking far into the future, and is a member of a coalition of water districts in Colorado and Wyoming looking at the possibility of moving water via pipeline from the Flaming Gorge on the border of Wyoming and Utah, to their customers.

Cathy Proctor covers energy, the environment, transportation and construction for the Denver Business Journal and writes for the "Earth & Energy" blog.

Rueter-Hess Reservoir gets rollout

By Rhonda Moore | Posted: Wednesday, March 21, 2012 10:00 am

Rueter-Hess Reservoir became a reality with a grand opening celebration at the eight-year project that Parker Water and Sanitation district hopes will be the "jewel" of Douglas County.

District manager Frank Jaeger, who led the charge to build Rueter-Hess, welcomed dignitaries at the March 21 celebration, atop the dam of the 72,000 acre-foot reservoir.

Originally planned as a 16,000 acre-foot reservoir, the project was expanded with the financial support of Castle Rock, Castle Pines and Stonegate to its present capacity in hopes of serving as a regional storage system, Jaeger said.

"We started planning for this 27 years ago when we recognized the need for a renewable source of water for Douglas County and this area," Jaeger said. "You're now sitting (along) what will be the jewel of Douglas County and what will be the provider for Parker and its partners. This is one step in a long journey."

The reservoir project includes 2,000 acres of open space, contingent upon future funding, according to the district. If financing comes through for recreational use, activities could include fishing, hiking, cycling and non-motorized boating.

Completion of Rueter-Hess, which is owned and managed by the Parker Water and Sanitation District, came the same year that the district is celebrating its 50th anniversary.

Rueter-Hess Reservoir is about three miles southwest of Parker and, when filled, will have a surface size of 1,140 acres, 50 percent larger than Cherry Creek Reservoir. On grand opening day, the reservoir was filled to a depth of about 57 feet, with enough water to serve 9,000 houses for one year.

Castle Rock's utilities director Ron Redd was "excited" to see the project come to completion as Castle Rock mulls its options for a long-term water provider in hopes of helping to fill the reservoir, he said. The water in the Rueter-Hess on opening day was sufficient to serve every household in Castle Rock for six months, he said.

Redd's department aims to finalize its report and presentation for town council as the town moves toward a final decision for a long term water provider, Redd said. The goal is to have something to present by the end of April for public review, he said.

""I think this helps people see what we've been working on for so long," Redd said. "I think people will start catching the vision of what Rueter-Hess means to this community."

Parker opens new reservoir this week

By CHRIS WOODKA | cwoodka@chieftain.com | Posted: Monday, March 19, 2012 12:00 am

A celebration for the largest Front Range reservoir to be permitted and built in more than two decades will be this week in Parker.

It probably will take years to fill, and will benefit several Douglas County communities that are dependent on groundwater.

Parker Water and Sanitation has completed Rueter-Hess Reservoir, a 72,000 acre-foot storage facility that will store water for Parker and surrounding communities in the South Denver area.

"The project is a significant accomplishment for Parker Water and Sanitation District, its customers and the entire south metropolitan area. Congratulations is due all around," said Frank Jaeger, manager of the district.

Parker serves about 45,000 customers.

Rueter-Hess has been in the planning stages for 25 years and under construction for the last eight. It cost $165 million to build, including $56 million from Castle Rock, Castle Pines North and Stonegate, which like Parker are located in Douglas County.

Parker began planning for a reservoir in 1985, when studies revealed the community would face a shortfall of water from its primary source, the Denver Basin aquifers. The Rueter-Hess site, located in Newlin Gulch, 3 miles southwest of Parker, was chosen in 1999.

For the next 20 years, the district worked toward building a 16,000 acre-foot reservoir to meet its own needs.

The other Douglas County communities joined the project in 2008, expanding the capacity of Rueter-Hess by 56,000 acre-feet.

The reservoir still must undergo state safety inspections before it can begin storing water. It will collect water flows from wet years for use during summer months and dry years.

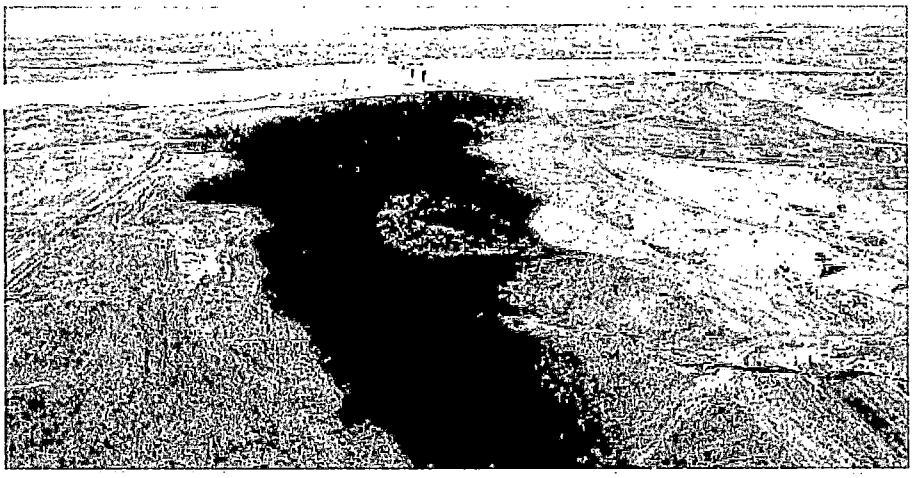
It is the largest Front Range reservoir to open since Aurora Reservoir with a capacity of 36,150 acre-feet, began filling in 1990.

the waterline

March 2012
www.pwsd.org

Parker Water And Sanitation District
19801 E. Mainstreet, Parker, CO 80138
303.841.4627

Rueter-Hess Reservoir Completed



Rueter-Hess Reservoir November 2011
Photo © 2011 Jackie Shumaker/JSP

After 25 years of planning and eight years of construction, Rueter-Hess Reservoir is about to come on line.

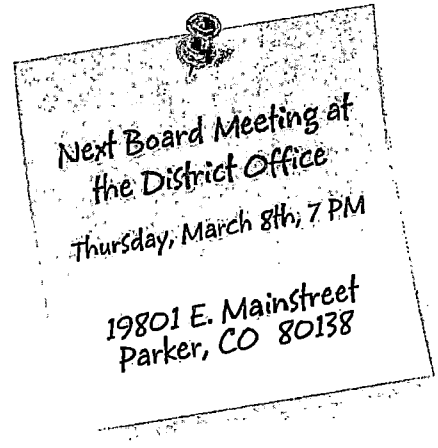
The reservoir is a milestone for the south metropolitan community as it is the first large water storage facility to be permitted by the federal government and built along the Front Range in more than two decades. As Secretary of Interior Ken Salazar remarked at the reservoir's 2008 dedication, "The project is a testament to the foresight and persistence of the community and its leaders."

Parker Water has relied almost entirely on non-renewable groundwater from Denver Basin aquifers - aquifers that are being depleted. Now, with Rueter-Hess Reservoir poised to become a key water management tool, Parker Water can help preserve the aquifers by storing available water flows for use in dry years and during peak summer usage.

The 72,000 acre-foot reservoir will begin filling after state safety inspections are completed. Once filled, it will have a surface size of 1,140 acres - 50 percent larger than Cherry Creek Reservoir.

Rueter-Hess Reservoir is located about three miles southwest of the Town of Parker on Newlin Gulch, and has a diversion structure on Cherry Creek to capture available water flows. It will allow Parker Water to store runoff, capture and reuse water, and lessen dependence on non–renewable groundwater. It is an important project in helping address Parker Water customers' and Douglas County's water needs.

Continued top of page 2



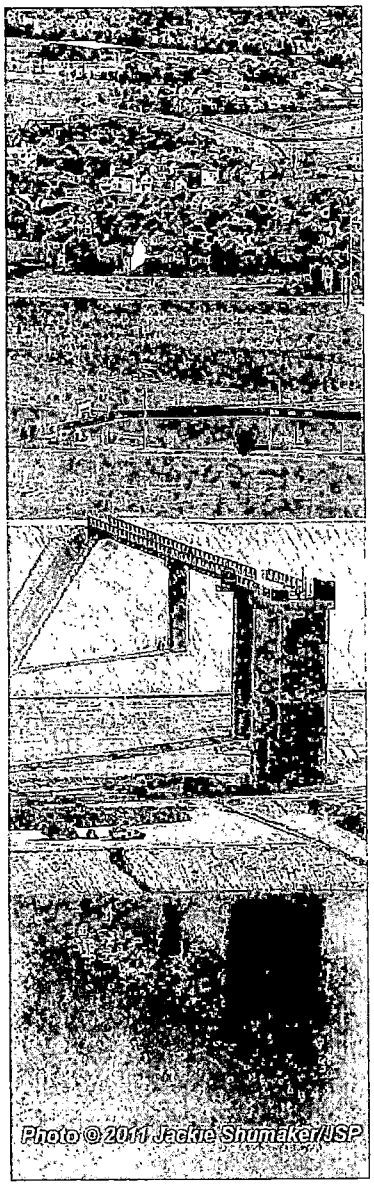
Water Saver Tip of the Month

It's a Toilet, Not a Trash can!

Toilets are only meant for one activity, and you know what we're talking about! When the wrong thing is flushed, results can include costly backups on your own property or problems at your local wastewater treatment plant. That's why it's so important to treat toilets properly and flush only your personal contributions to the local wastewater treatment plant.

Don't flush any items like baby wipes and diapers, cotton swabs, syringes, candy and other food wrappers, clothing labels, sponges, toys, aquarium gravel or kitty litter, rubber items such as latex gloves, cigarette butts, sanitary napkins, underwear or disposable toilet brushes.

Information courtesy of the Water Environment Federation and the WATER'S WORTH IT™ campaign. WATER'S WORTH IT™ is a trademark of the Water Environment Federation.



The reservoir is owned and managed by the Parker Water and Sanitation District, and will serve both Parker Water customers, as well as those in the Douglas County communities of Castle Rock, Castle Pines North and Stonegate through partnership agreements. Other Douglas County communities may join as partners in the future.

Planning for the project began shortly after the first hydrologic studies were launched in 1985, which reported that the Parker Water District would face a 3,000 acre-foot shortfall. That report began a series of additional studies that led to the development of Rueter-Hess Reservoir.

After a failed attempt to develop a site in Castlewood Canyon, the formal federal permitting process began on the Rueter-Hess site in 1999 and was completed in 2008 with the granting of a 404 Clean Water permit from the Army Corps of Engineers. The EIS process included public comment and studies on the environmental impacts to wetlands, vegetation, noise, air quality, and ground and surface water. Parker Water mitigated all potential environmental impacts in order for the federal permitting process to proceed.

Originally, the Rueter-Hess Reservoir project was planned for Parker Water customers only, and sized at 16,000 acre-feet of water storage, but regional growth and interest from the neighboring communities of Castle Rock, Castle Pines North and Stonegate led to an expanded reservoir of 72,000 acre-feet. The participating communities funded the project's expansion.

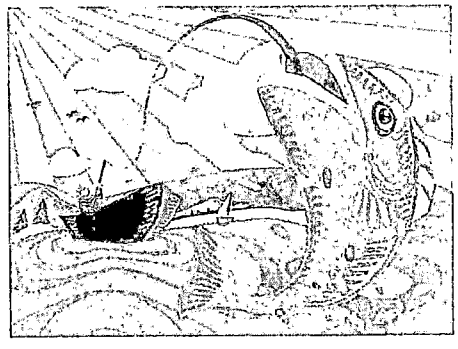
The reservoir project includes 2,000 acres of open space, which, after undergoing planning and identifying funding, could be available for such activities as fishing, hiking, cycling and non-motorized boating.

The reservoir will help the region better manage its limited water supplies. With the completion of Rueter-Hess Reservoir, Parker Water's program of water reuse, conservation, xeriscape education and efforts to develop renewable water resources can be further accomplished.

Frank Jaeger, PWSD district manager, said that with the construction completion, "The project is a significant accomplishment for Parker Water and Sanitation District, its customers and the entire south metropolitan area. Congratulations is due all around."

Where's the Recreation?

Throughout the permitting and construction of Rueter-Hess Reservoir, the majority of citizens have had only one question: "When can I _____ (*insert here:* boat, fish, hike, walk my dog, etc.) at the new reservoir?"



PWSD has always planned for recreation opportunities at Rueter-Hess. Our environmental impact studies included potential recreation plans and we noted the desire for recreation throughout the many public meetings held as part of the permitting process. Of course, planning and developing recreation at the reservoir, and providing staff and ensuring safety will be an expense. Funding the water project has been our top priority, putting recreation on hold.

But, there is good news. We are currently working with the Town of Parker to explore opportunities to partner on recreation improvements at Rueter-Hess Reservoir. We will continue to explore all options and will keep the public informed as we move forward.

Rueter-Hess Reservoir Facts

Rueter-Hess Reservoir August 2011

Photo © 2011 Jackie Shumaker/JSP

- Rueter-Hess Reservoir is located about 3 miles southwest of the Town of Parker on Newlin Gulch.
- 72,000 acre-foot reservoir with a 1,140 acre footprint (50 percent larger than Cherry Creek Reservoir).
- 196 foot-tall and 7,675-foot-long earthen dam.
- Will serve Parker Water and Sanitation District customers (approx. 45,000 residents/customers) and other Douglas County communities through partnership agreements: communities of Castle Rock, Castle Pines North and Stonegate.
- 2,000 acres of dedicated open space alongside reservoir.
- More than 25 years in planning and 9 years in permitting for first phase and expansion. Won first approval from U.S. Army Corps of Engineers in March 2004 (16,200 acre-foot reservoir); approval of expansion in April 2008 (expanded by 55,000 acre-feet to a 72,000 acre-foot total reservoir).
- Estimated cost to build expansion: $56 million. Total cost: $165 million. Expansion paid for by community partners.

Rueter-Hess Reservoir 1985 – 2012 Timeline

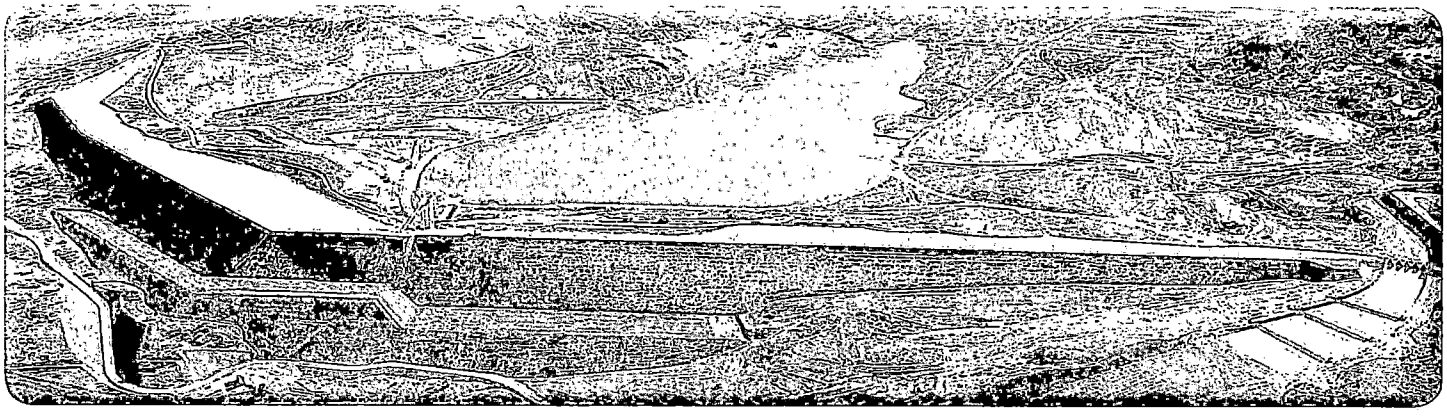


Photo © 2011 Jackie Shumaker/JSP

1985 Planning for reservoir begins
1996 Court decree entered for Rueter-Hess Reservoir
1996 First geotechnical studies at Rueter-Hess Reservoir
1997 First environmental studies at Rueter-Hess Reservoir
1999 U.S. Army Corps of Engineers draft Environmental Impact Statement (EIS) process begins
2000 Public scoping meetings held to introduce project
2002 Public input on draft EIS
2004 404 Clean Water Act permit issued – 16,000 acre-foot reservoir
2005 Expansion EIS – 72,000 acre-foot reservoir Partners: Castle Rock, Stonegate & Castle Pines North
2008 404 Clean Water Act permit for expanded reservoir; Dam named for PWSD Manager Frank Jaeger
2012 Completion of construction of Rueter-Hess Reservoir

SENATE JOINT RESOLUTION 12-021

BY SENATOR(S) Harvey, Scheffel, Grantham, Hodge, Schwartz, Shaffer B., Aguilar, Bacon, Boyd, Brophy, Cadman, Carroll, Foster, Giron, Guzman, Heath, Hudak, Johnston, King K., King S., Lambert, Lundberg, Mitchell, Morse, Neville, Newell, Nicholson, Renfroe, Roberts, Spence, Steadman, Tochtrop, White, Williams S.;
also REPRESENTATIVE(S) Holbert, McNulty, Murray, Looper, Ryden, Sonnenberg, Acree, Balmer, Barker, Baumgardner, Beezley, Bradford, Brown, Casso, Conti, Coram, Court, DelGrosso, Duran, Ferrandino, Fields, Fischer, Gardner B., Hamner, Hullinghorst, Jones, Joshi, Kagan, Kefalas, Kerr A., Kerr J., Labuda, Lee, Liston, Massey, McCann, McKinley, Nikkel, Pabon, Pace, Peniston, Priola, Ramirez, Schafer S., Scott, Singer, Solano, Soper, Stephens, Summers, Swalm, Swerdfeger, Szabo, Tyler, Vaad, Vigil, Waller, Williams A., Wilson, Young.

CONCERNING RECOGNITION OF THE 50TH ANNIVERSARY OF PARKER WATER AND SANITATION DISTRICT AND CONSTRUCTION OF THE RUETER-HESS RESERVOIR.

WHEREAS, An adequate supply of high-quality water is essential for the economy, sustainable growth, and quality of life for residents of Parker, Colorado; and

WHEREAS, Colorado has a semi-arid climate and is prone to periodic droughts, which means it must carefully conserve its limited supply of water and reuse as much as possible; and

WHEREAS, Douglas County and the south metropolitan Denver area are especially vulnerable to drought and water supply shortages, and the Parker area is dependent on groundwater from its nonrenewable aquifer; and

WHEREAS, Parker Water and Sanitation District (Parker Water),

founded in 1962, originally served 100 residents with one well, but now, at its 50-year anniversary, serves 45,000 citizens with 36 wells; and

WHEREAS, Parker Water is a leading Colorado water provider with well-developed programs in conservation, water education, water reuse, and efforts to develop renewable water resources; and

WHEREAS, After more than 25 years of planning, including 9 years of environmental permitting and 8 years of construction, the 72,000 acre-foot Rueter-Hess Reservoir is now completed and ready to fill; and

WHEREAS, Rueter-Hess Reservoir is the first major reservoir built in the Front Range in recent decades; and

WHEREAS, Rueter-Hess Reservoir will provide a water management tool for Parker Water that will store storm water, capture and reuse water, and help preserve the aquifer by storing available water flows for use in dry years and during peak summer usage; and

WHEREAS, Adding water storage in the south metro area is an issue of regional and statewide importance; now, therefore,

Be It Resolved by the Senate of the Sixty-eighth General Assembly of the State of Colorado, the House of Representatives concurring herein:

That the General Assembly congratulates Parker Water and Sanitation District:

(1) On its foresight and persistence in planning and constructing Rueter-Hess Reservoir; and

(2) On its 50-year anniversary of providing reliable and quality water service to the citizens of the south metro area.

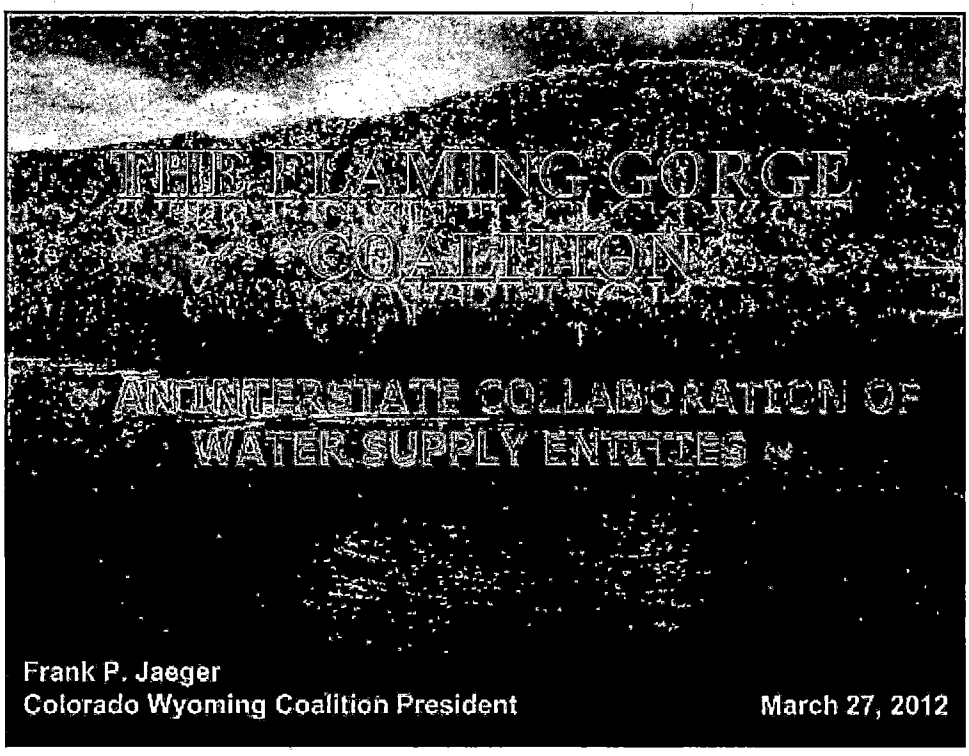
Be It Further Resolved, That a copy of this Joint Resolution be sent to Frank Jaeger, District Manager, Parker Water and Sanitation District.

Brandon C. Shaffer
PRESIDENT OF
THE SENATE

Frank McNulty
SPEAKER OF THE HOUSE
OF REPRESENTATIVES

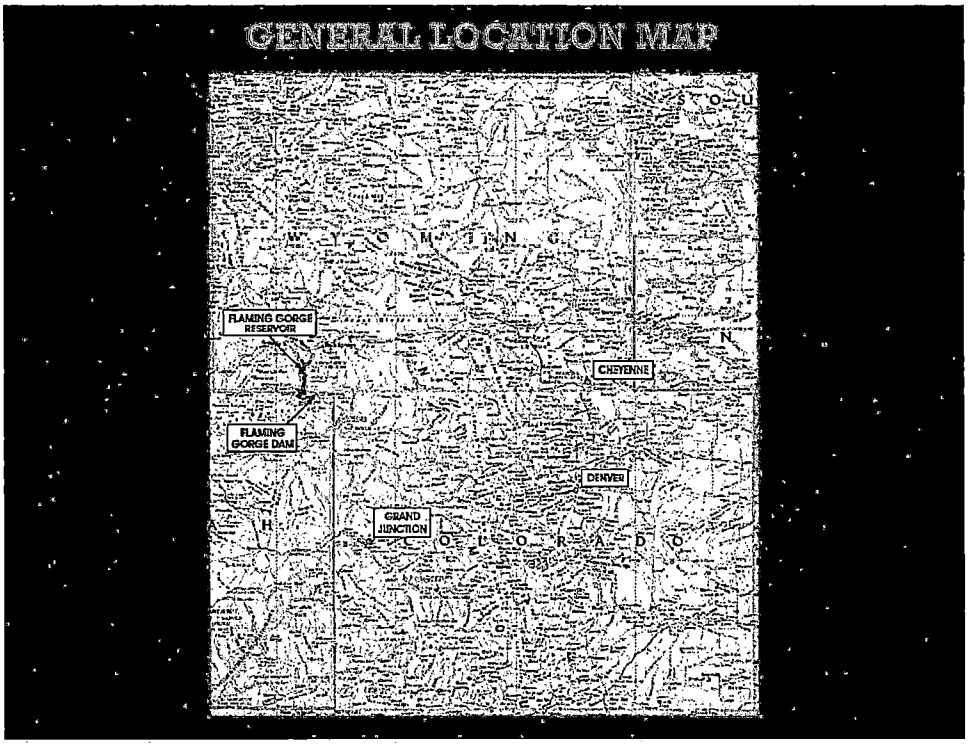
Cindi Markwell
SECRETARY OF
THE SENATE

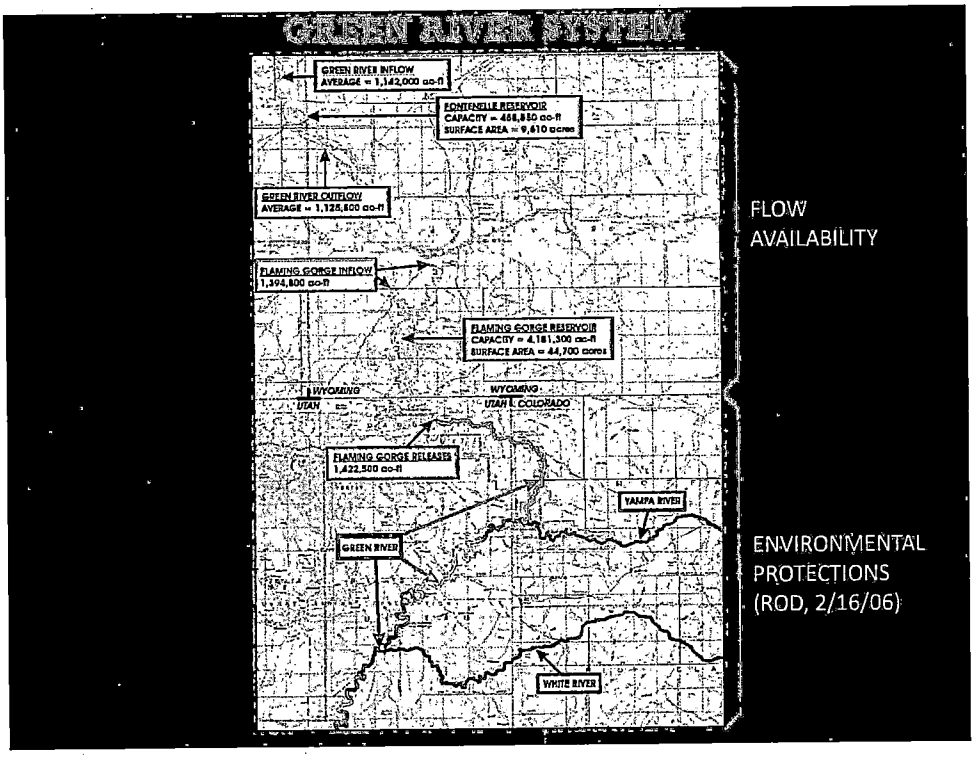
Marilyn Eddins
CHIEF CLERK OF THE HOUSE
OF REPRESENTATIVES

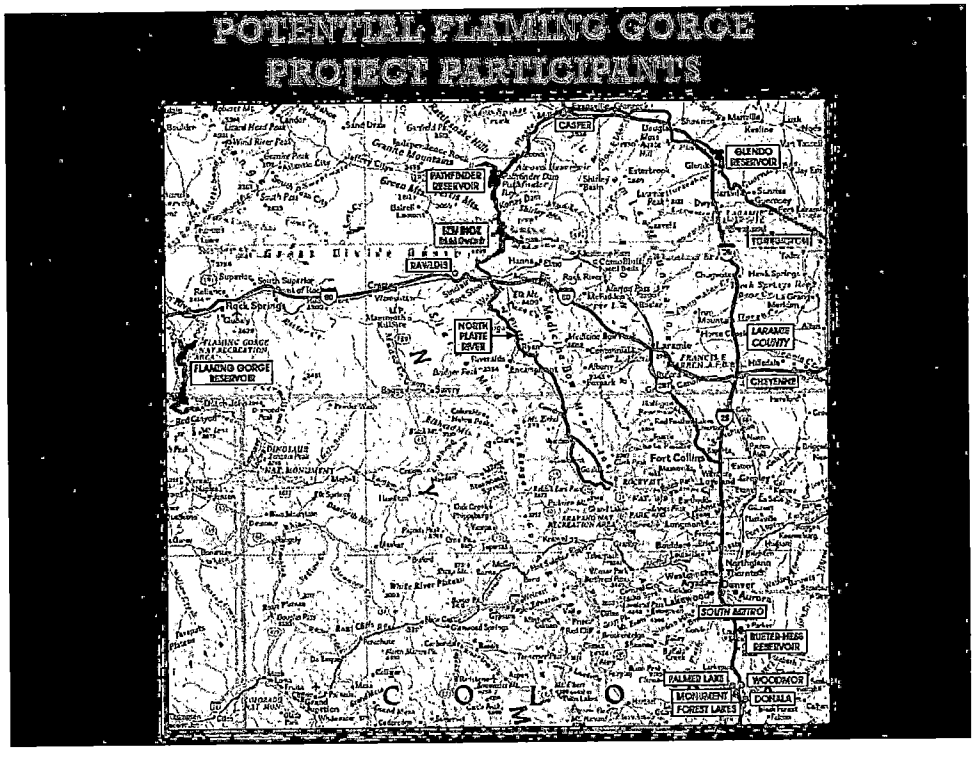


Frank P. Jaeger
Colorado Wyoming Coalition President

March 27, 2012




GREEN RIVER SYSTEM
GREEN RIVER INFLOW
AVERAGE = 1,142,000 ac-ft
FONTENELLE RESERVOIR
CAPACITY = 344,850 ac-ft
SURFACE AREA = 9,610 acres
GREEN RIVER OUTFLOW
AVERAGE = 1,125,600 ac-ft
FLAMING GORGE INFLOW
1,394,800 ac-ft
FLAMING GORGE RESERVOIR
CAPACITY = 4,181,300 ac-ft
SURFACE AREA = 44,700 acres
WYOMING
UTAH
WYOMING
UTAH
COLORADO
FLAMING GORGE RELEASES
1,422,500 ac-ft
YAMPA RIVER
GREEN RIVER
WHITE RIVER
FLOW AVAILABILITY
ENVIRONMENTAL PROTECTIONS (ROD, 2/16/06)


POTENTIAL FLAMING GORGE PROJECT PARTICIPANTS
CASPER
GLENDO RESERVOIR
PATHFINDER RESERVOIR
SEMINOE RESERVOIR
TORRINGTON
RAWLINS
Rock Springs
NORTH PLATTE RIVER
FLAMING GORGE RESERVOIR
LARAMIE COUNTY
CHEYENNE
SOUTH METRO
RUETER-HESS RESERVOIR
WOODMOOR
PALMER LAKE
MONUMENT
FOREST LAKES
DONALA
COLORADO

COALITION APPROACH

- BI-STATE COALITION OF PUBLIC WATER SUPPLIERS
- ELECTED LOCAL GOVERNMENTS REPRESENT OVER 500,000 CITIZENS IN TWO STATES (WITH CURRENT COALITION MEMBERS)

COALITION POPULATIONS

COLORADO	*POPULATION SERVED*
PIKES PEAK REGIONAL WATER AUTHORITY	30,000
DOUGLAS COUNTY (RURAL)	45,000
PARKER WATER & SANITATION DISTRICT	125,000
SOUTH METRO WATER SUPPLY AUTHORITY	190,000
TOWN OF CASTLE ROCK	85,000
WYOMING	
CITY OF CHEYENNE	69,000
CITY OF TORRINGTON	5,000
LARAMIE COUNTY	20,000
TOTAL POPULATION SERVED	*563,000*

COALITION APPROACH

- BI-STATE COALITION OF PUBLIC WATER SUPPLIERS
- ELECTED LOCAL GOVERNMENTS REPRESENT OVER 500,000 CITIZENS IN TWO STATES (WITH CURRENT COALITION MEMBERS)
- REDUCE DEMANDS ON AGRICULTURAL TRANSFERS

IMPACTS TO AGRICULTURE WITH NO NEW WATER SUPPLY DEVELOPMENT ON EAST SLOPE[1)]

BASIN	*ESTIMATED REQUIRED* AGRICULTURAL TRANSFERS (acres)
ARKANSAS	35-73,000
COLORADO	51-77,000
GUNNISON	21-28,000
REPUBLICAN	109,000
RIO GRANDE	83-84,000
SAN JUAN	7-13,000
SOUTH PLATTE	279,000
YAMPA	18-66,000
	500-700,000

1) From SWSI 2010.

COALITION APPROACH

- BI-STATE COALITION OF PUBLIC WATER SUPPLIERS
- ELECTED LOCAL GOVERNMENTS REPRESENT OVER 500,000 CITIZENS IN TWO STATES (WITH CURRENT COALITION MEMBERS)
- REDUCE DEMANDS ON AGRICULTURAL TRANSFERS
- MAXIMIZE REUSE

MAXIMIZING REUSE

RESIDENTIAL CONSUMPTIVE USE

IN-HOUSE: 0.25 ac-ft/yr x 0.1 = 0.025

OUTDOOR: 0.25 ac-ft/yr x 0.85 = 0.213

0.238 (48%)

REUSE

0.5 ac-ft ⇨ 0.25 ⇨ 0.125 ⇨ 0.06 ⇨ 0.03 ⇨ 0.013 ⇨ 0.003

REUSE DOUBLES THE USE OF FIRST-USE WATER

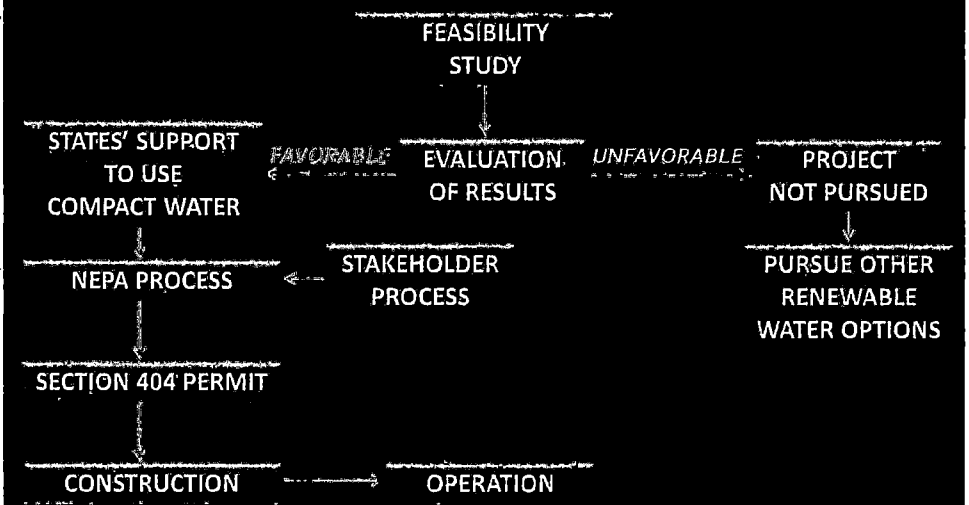
COALITION APPROACH

- BI-STATE COALITION OF PUBLIC WATER SUPPLIERS
- ELECTED LOCAL GOVERNMENTS REPRESENT OVER 500,000 CITIZENS IN TWO STATES (WITH CURRENT COALITION MEMBERS)
- REDUCE DEMANDS ON AGRICULTURAL TRANSFERS
- MAXIMIZE REUSE
- GOVERNANCE BY MEMBERSHIP WITH BYLAWS AND ELECTED OFFICIALS

FLAMING GORGE RESERVOIR FEASIBILITY STUDY FUTURE ADDITIONAL WATER NEED TO 2070 HORIZON

PARTICIPANT	*TOTAL FGR DEMAND (AF/YR)*
CHEYENNE BOARD OF PUBLIC UTILITIES	8,433
CITY OF TORRINGTON	10,380
DONALA WATER & SANITATION DISTRICT	2,040
DOUGLAS COUNTY (RURAL), CO	2,096
LARAMIE COUNTY, WY	9,518
PARKER WATER & SANITATION DISTRICT	22,696
SOUTH METRO WATER SUPPLY AUTHORITY	41,918
WOODMOOR WATER & SANITATION DISTRICT	3,930
TOWN OF MONUMENT/TRIVIEW METRO DISTRICT	6,129
TOTAL	107,140 AC-FT/YR

PROCESS PROPOSED BY THE COALITION



WHY ARE WE CONDUCTING A FEASIBILITY STUDY?

- DEFINE THE PURPOSE AND NEED FOR A PROJECT (PRIOR TO ENTERING ANY PERMITTING PROCESS)
- DEFINE FIRST USE NEEDS, BASED ON REUSE AND CONSERVATION
- IDENTIFY SPECIFIC PROJECT YIELDS, AS INDIVIDUAL MEMBERS WILL OWN THIS WATER
- IDENTIFY WHAT PORTION OF COLORADO AND WYOMING COMPACT ENTITLEMENTS BEING SOUGHT
- DEFINE WATER LEVEL EFFECTS IN THE RESERVOIR

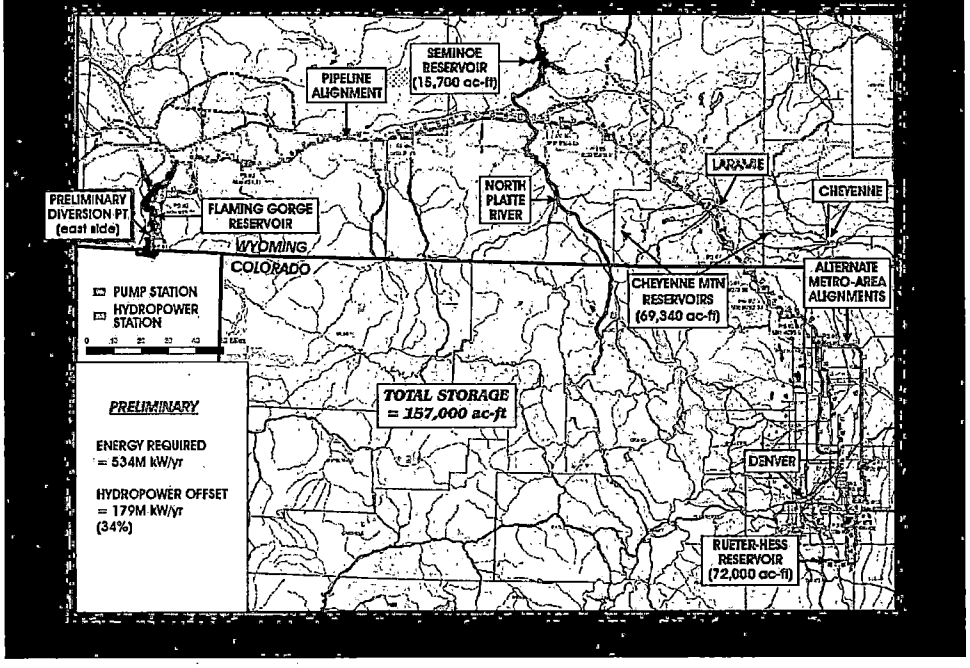
WHY ARE WE CONDUCTING A FEASIBILITY STUDY?

- SHARE DETAILED PROJECT INFORMATION TO WORK TOWARD COOPERATIVE SOLUTIONS
- DEVELOP ACTUAL INDIVIDUAL COSTS EACH MUNICIPAL PROVIDER WILL HAVE TO PAY TO BUILD AND OPERATE PROJECT
- DEVELOP FINANCING ALTERNATIVES
- ASSESS ALL ASPECTS OF THE FEASIBILITY OF THE PROJECT

WHAT INFORMATION WILL BE PROVIDED FROM THE FEASIBILITY STUDY?

- RECOMMENDED ALIGNMENTS
- FACILITY LOCATIONS

PRELIMINARY PROJECT FACILITIES



WHAT INFORMATION WILL BE PROVIDED FROM THE FEASIBILITY STUDY?

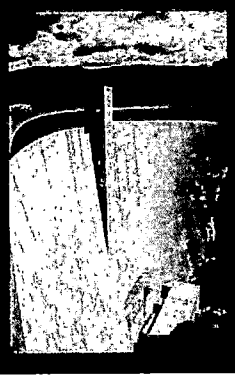
- RECOMMENDED ALIGNMENTS
- FACILITY LOCATIONS
- UNIT COSTS OF WATER DELIVERED (CAPITAL AND O & M)
- RECOMMENDATIONS REGARDING RESULTS
- RECOMMENDATIONS REGARDING NEXT STEPS

HOW DO WE ADDRESS THESE ISSUES?

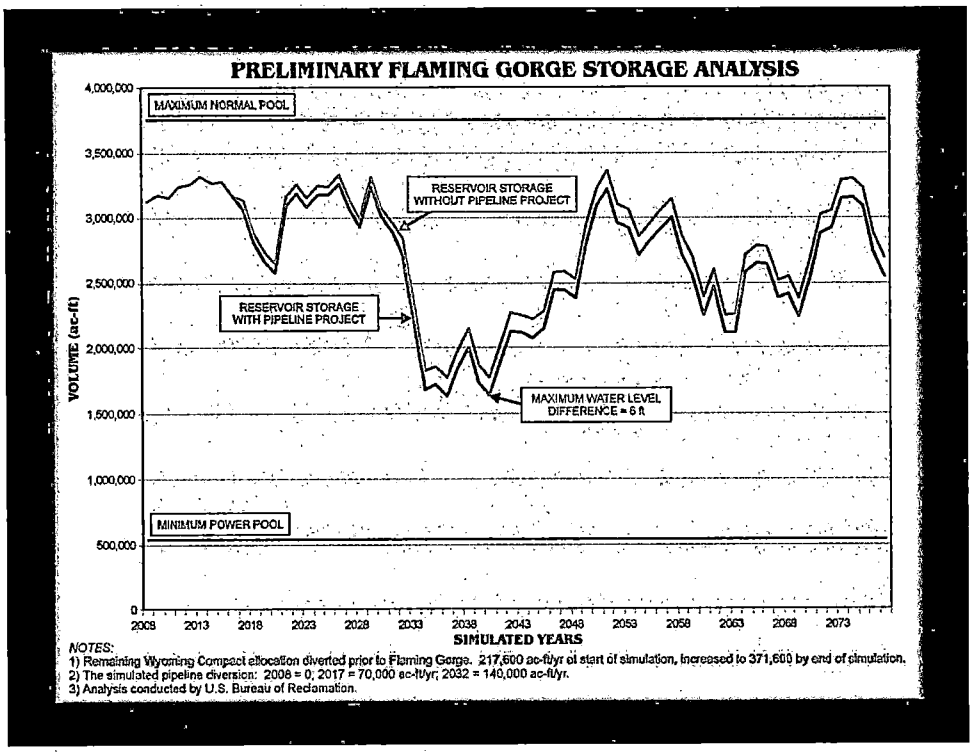
- USE RECLAMATION COLORADO RIVER SYSTEM MODEL
- MODEL FIRM AND VARIABLE YIELDS CONSIDERING
  - ENVIRONMENTAL FLOWS
  - POWER FLOWS
  - COMPACT ENTITLEMENTS
  - CLIMATE CHANGE
- SIMULATE WATER NEEDS IN TIME AND AMOUNT

HYDROLOGIC MODELING

- MULTIPLE RUNS TO BEST MATCH SUPPLY TO DEMAND
- DEVELOP NEED FOR STORAGE BASED ON DIFFERENCES IN SUPPLY AND DEMAND



- VARIABLE DEMANDS TO MINIMIZE RESERVOIR IMPACTS (CARRYOVER STORAGE IN COALITION RESERVOIRS)
- ASSESS OVERALL RESERVOIR LEVEL CHANGES



WHAT ARE THE CHALLENGES FOR THIS PROJECT?

- ENVIRONMENTAL ISSUES DOWNSTREAM ON GREEN RIVER
  - ✓ 2006 EIS ROD PROTECTS DOWNSTREAM ENVIRONMENT. COALITION WILL FULLY COMPLY WITH ROD FLOW REQUIREMENTS.
- RECREATIONAL/FISH ISSUES IN FLAMING GORGE RESERVOIR
  - ✓ MINIMAL IMPACT TO RESERVOIR LEVELS (EXPECTED TO BE 3-6 FT).

WHAT ARE THE CHALLENGES FOR THIS PROJECT?

- PIPELINE CROSSINGS
  - ✓ NEPA PROCESS WILL EVALUATE MITIGATION NECESSARY ALONG PIPELINE ROUTE; NOT EXPECTED TO BE A SIGNIFICANT ISSUE.
- WATER AVAILABILITY UNDER THE COLORADO RIVER COMPACT (FOR BOTH WYOMING AND COLORADO)
  - ✓ NEED TO EVALUATE WHETHER WYOMING AND COLORADO ARE DEVELOPING WATER WITHIN THEIR RESPECTIVE ALLOCATIONS.
- LAST STOP / WEST SLOPE (IN BOTH STATES)
  - ✓ WORK TO BUILD RELATIONSHIPS WITH WEST SLOPE INTERESTS.

WHAT ARE THE CHALLENGES FOR THIS PROJECT?

- NEED FOR STATE SUPPORT (IN BOTH STATES)
  - ✓ REGIONAL STATEWIDE WATER IS VITAL FOR BOTH WYOMING'S AND COLORADO'S ECONOMIC HEALTH. STATES (AND DEIS) NEED TO RECOGNIZE THIS AND SUPPORT WORTHY PROJECTS.
- COMPACT CURTAILMENT
  - ✓ WATER RIGHT WILL BE JUNIOR IN PRIORITY. LIVESTOCK WATER WITH CARRYOVER STORAGE AND SUPPLEMENTAL SOURCES OF WATER.

Colorado-Wyoming Water Supply Project – 2012 Update
Flaming Gorge to Monument, CO Area
Pipeline and Pump Station Sizing and Costs

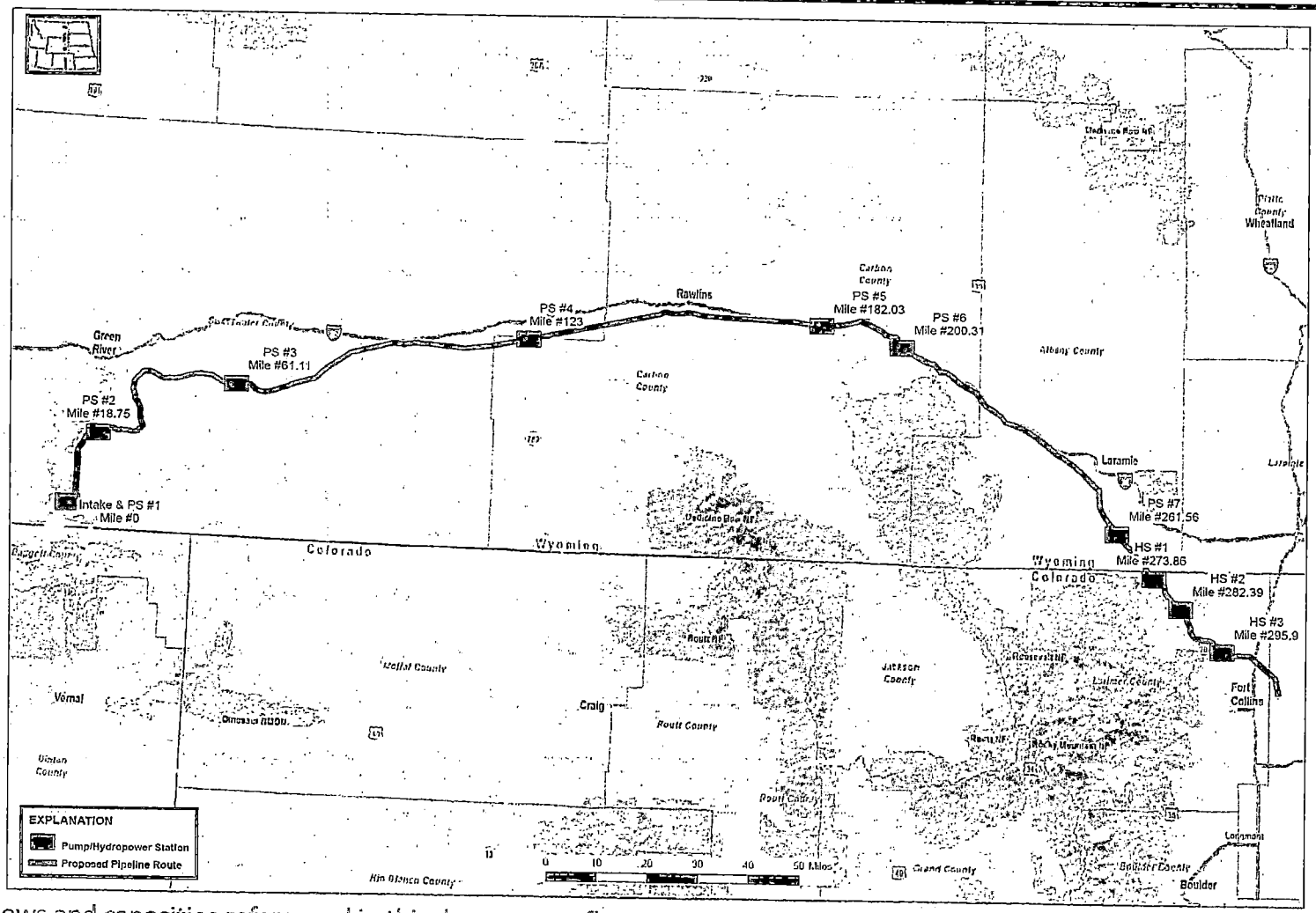
2012 Update to Develop Pipeline and Pumping Requirements and Costs for:

- Specific Flows of
  - 163 cfs (107,000 AF/yr) Flaming Gorge to North Platte River
  - 147 cfs (96,800 AF/yr) North Platte River to Mile 262.7 (Cheyenne BoPU and Laramie County)
  - 120 cfs (78,800 AF/yr) Mile 262.2 to Wellington, CO Area
  - 120 cfs from Wellington to Parker, CO
  - 100 cfs (65,700 AF/yr) to Rueter-Hess Reservoir
  - 20 cfs (13,100 AF/yr) to Monument, CO
- Eliminate Cactus Hill Reservoir

The flows and capacities referenced in this document reflect water quantities requested by project participants. BUREC modeling is needed to establish the actual quantities that may be available.

Colorado-Wyoming Water Supply Project – 2012 Update
Flaming Gorge to Wellington CO Area
Proposed Pipeline and Pump Stations

DRAFT



The flows and capacities referenced in this document reflect water quantities requested by project participants. BUREC modeling is needed to establish the actual quantities that may be available.

Colorado-Wyoming Water Supply Project – 2012 Update
Flaming Gorge to Wellington CO Area
Pipeline and Pump Station Sizing and Costs

DRAFT

Main System Features, FGR to Wellington, CO area

	Flaming Gorge to North Platte River	North Platte River to Mile 262.2	Mile 262.2 to Wellington CO Area
Design Flow, cfs	163	147	120
Pipe Size, in	66	66	60
Pipe Length ft / mi	961,100/182.0	425,700/80.7	261,600/49.5
Pump Stations	5	2	0
Total Installed Pump Station Horsepower	75,300	19,500	0
Hydropower Stations	0	0	3
Total Installed Hydropower Production (MWhr/yr)	0	0	153,000

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Colorado-Wyoming Water Supply Project – 2012 Update
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Project Cost to Wellington Area

Reach	Annual Volume (AF/yr)	Flow (cfs)	Construction Cost (Millions of Dollars)
1	107,140	163	140
2	107,140	163	204
3	107,140	163	287
4	107,140	163	275
5	96,760	147	94
6	96,760	147	283
7	78,808	120	60
8	78,808	120	46
9	78,808	120	63
10	78,808	120	71

2012 Construction Cost Estimate	$1,523,000,000
20% Construction Contingencies	$304,600,000
Total Construction Costs	$1,827,600,000
12% Engineering	$219,312,000
5% Legal/Permitting	$91,380,000
Total Costs	$2,138,292,000

Use (Billions of Dollars)	2.1

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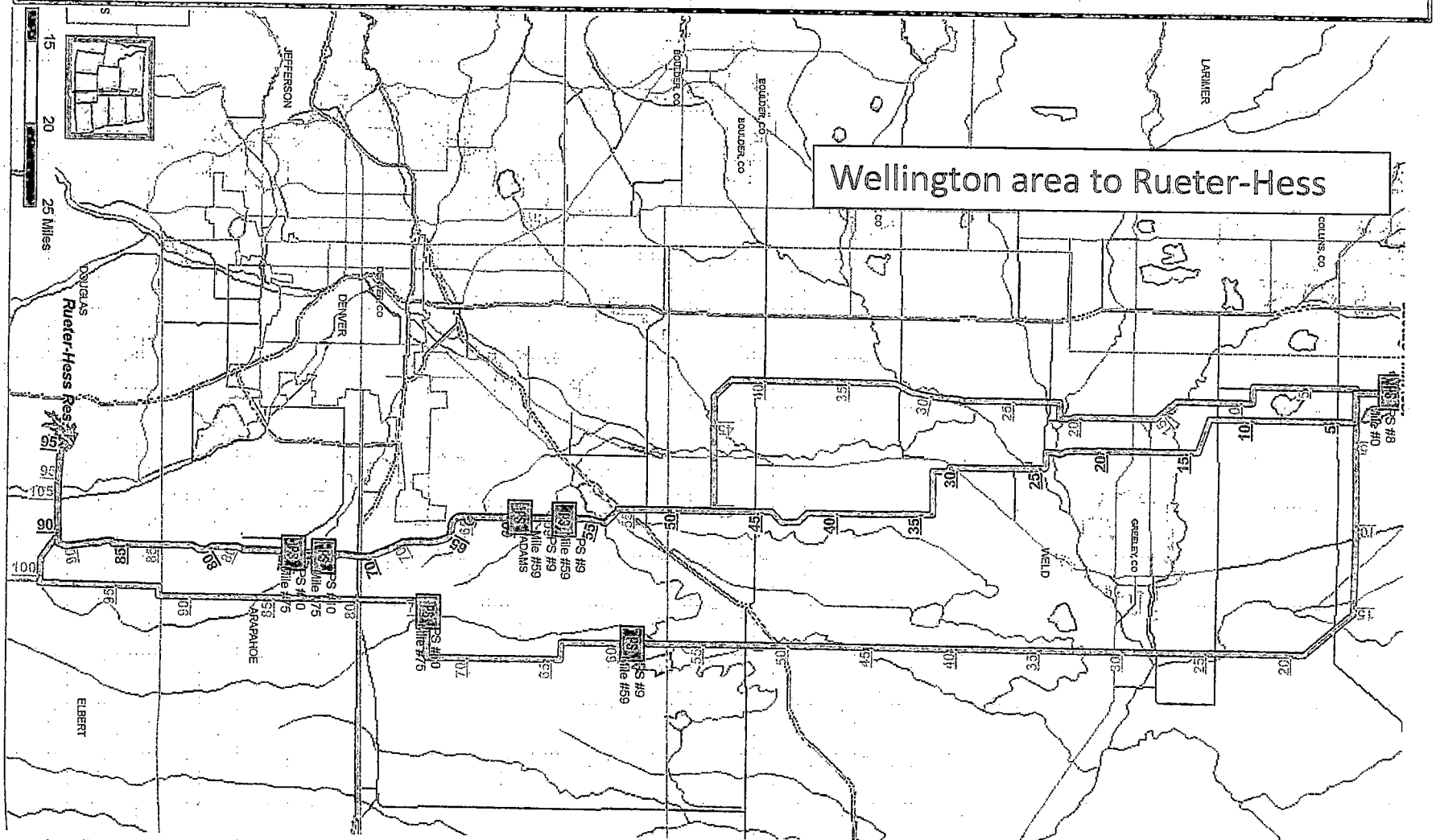
Colorado-Wyoming Water Supply Project – 2012 Update
Wellington, CO area to Rueter-Hess Reservoir
Proposed Pipeline and Pump Stations

DRAFT



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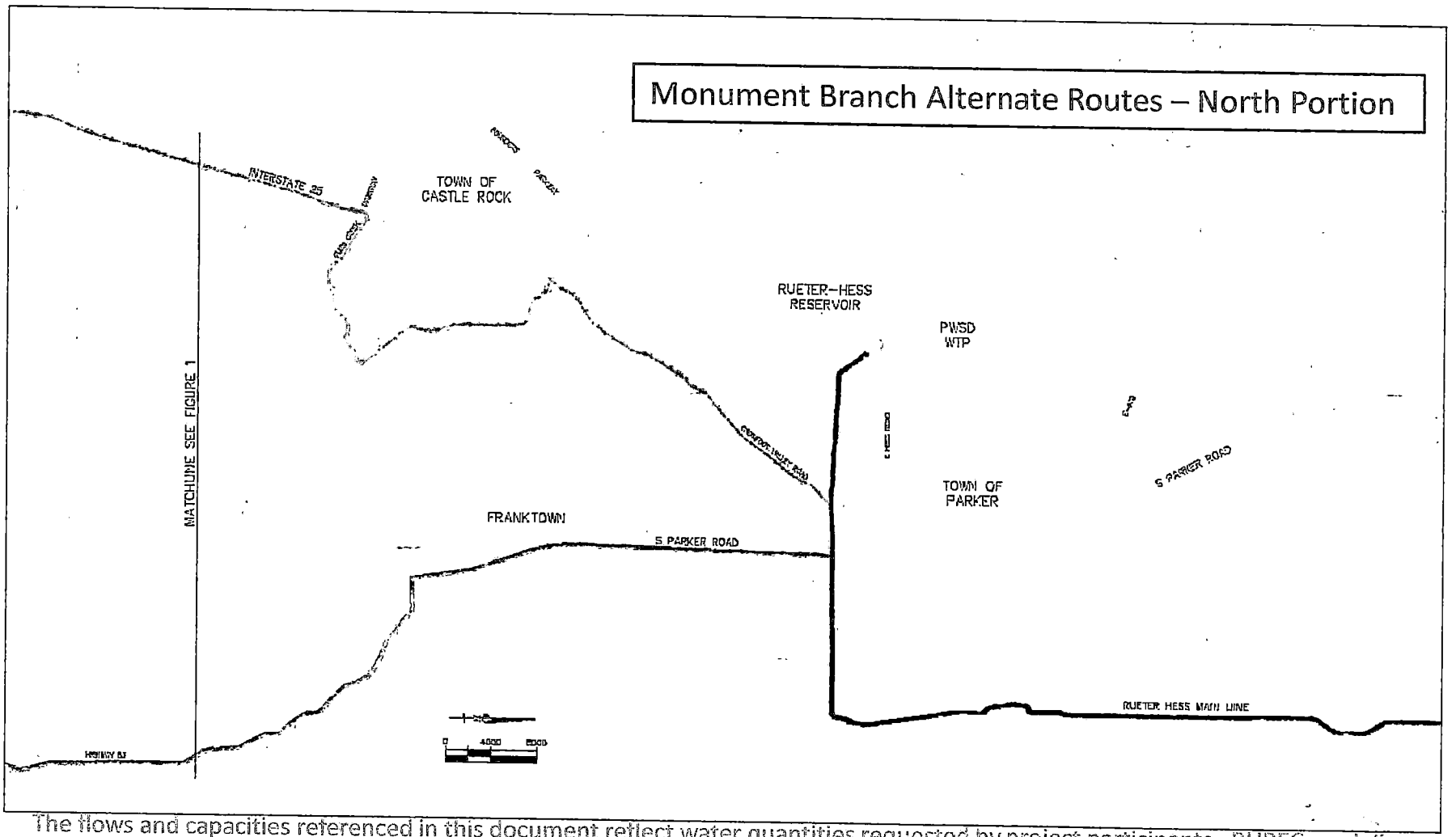
Colorado-Wyoming Water Supply Project – 2012 Update
Parker to Monument area
Pipeline and Pump Station Sizing and Costs

DRAFT



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Colorado-Wyoming Water Supply Project – 2012 Update
Rueter-Hess to Monument area
Pipeline and Pump Station Sizing and Costs

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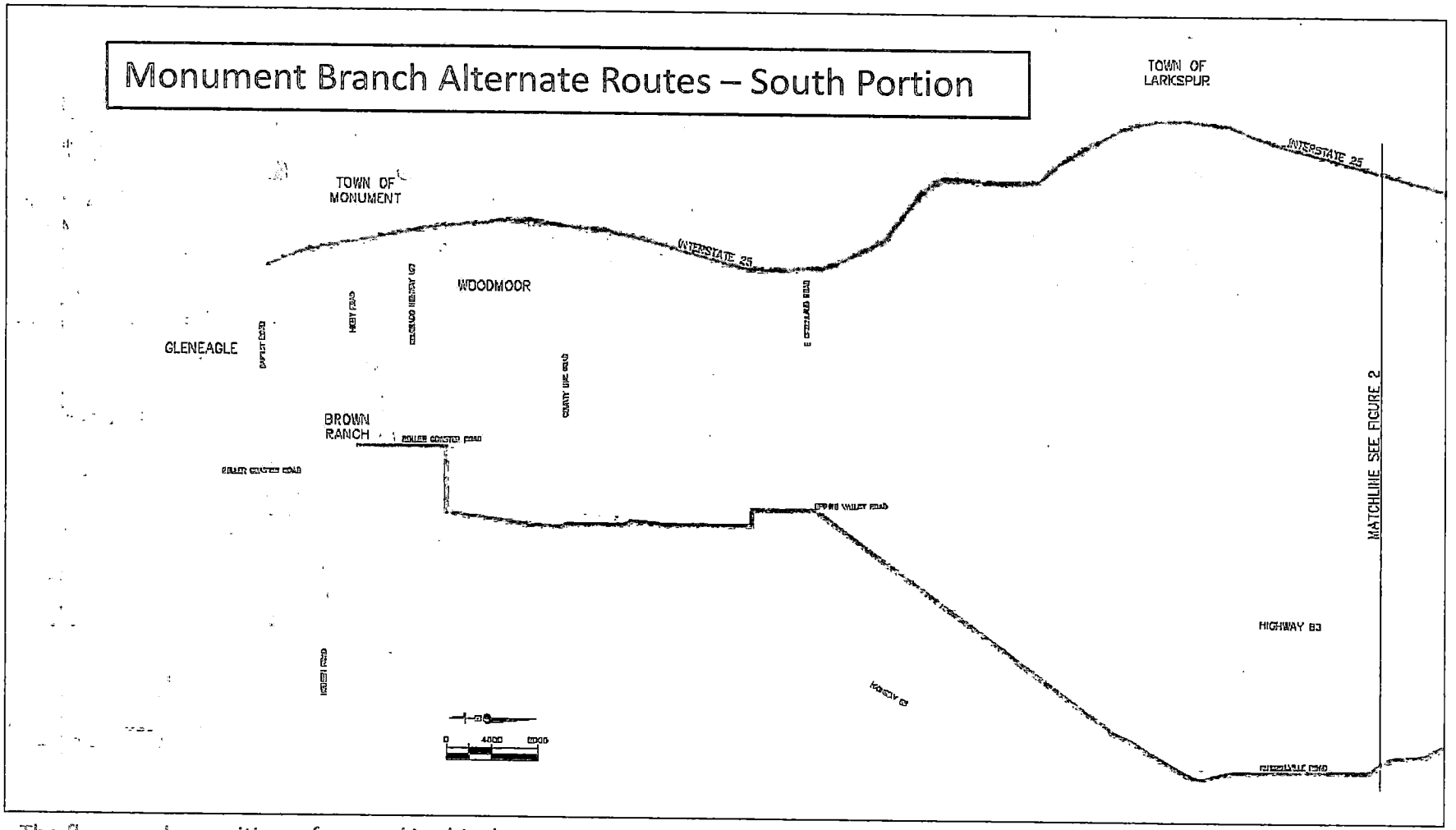

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Colorado-Wyoming Water Supply Project – 2012 Update
Wellington area to Monument area
Pipeline and Pump Station Sizing and Costs

DRAFT

Wellington to Monument, Main System Features

	Wellington to Parker	Monument Branch
Design Flow, cfs	120	20
Pipe Size, in	60	30
Pipe Length ft / mi	501,400 / 95	170,200 / 32
Pump Stations	2	2
Installed Horsepower per station	17,500	5,000

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Colorado-Wyoming Water Supply Project – 2012 Update
Flaming Gorge to Monument, CO Area
Pipeline and Pump Station Sizing and Costs

DRAFT

Total Project Cost

	Flaming Gorge Reservoir to Wellington CO Area (78,800AF/yr)	Wellington CO Area to Rueter-Hess Reservoir (65,700AF/yr)	Monument Branch (13,100AF/yr)	Total
Total Capital Cost =	$2,100,000,000	$513,785,000	$83,331,000	$2,697,116,000
Annual Payment (5% - 50 Years) =	$115,030,000	$28,140,000	$4,560,000	$147,730,000
Annual Power Costs =	$33,440,000	$14,259,000	$2,099,000	$49,798,000
Annual O&M Costs =	$9,140,000	$2,196,000	$356,000	$11,692,000
Annual Hydro Revenue =	$10,990,000	$0	$0	$10,990,000
Total Annual Costs =	$146,620,000	$44,595,000	$7,015,000	$198,230,000
Annual Unit Cost Per Acre-Foot (78,800AF/yr) =	$1,861	$566	$89	$2,516
Annual Unit Cost Per 1,000 gal =	$5.71	$1.74	$0.27	$7.72

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Flaming Gorge Feasibility Study Budget Request

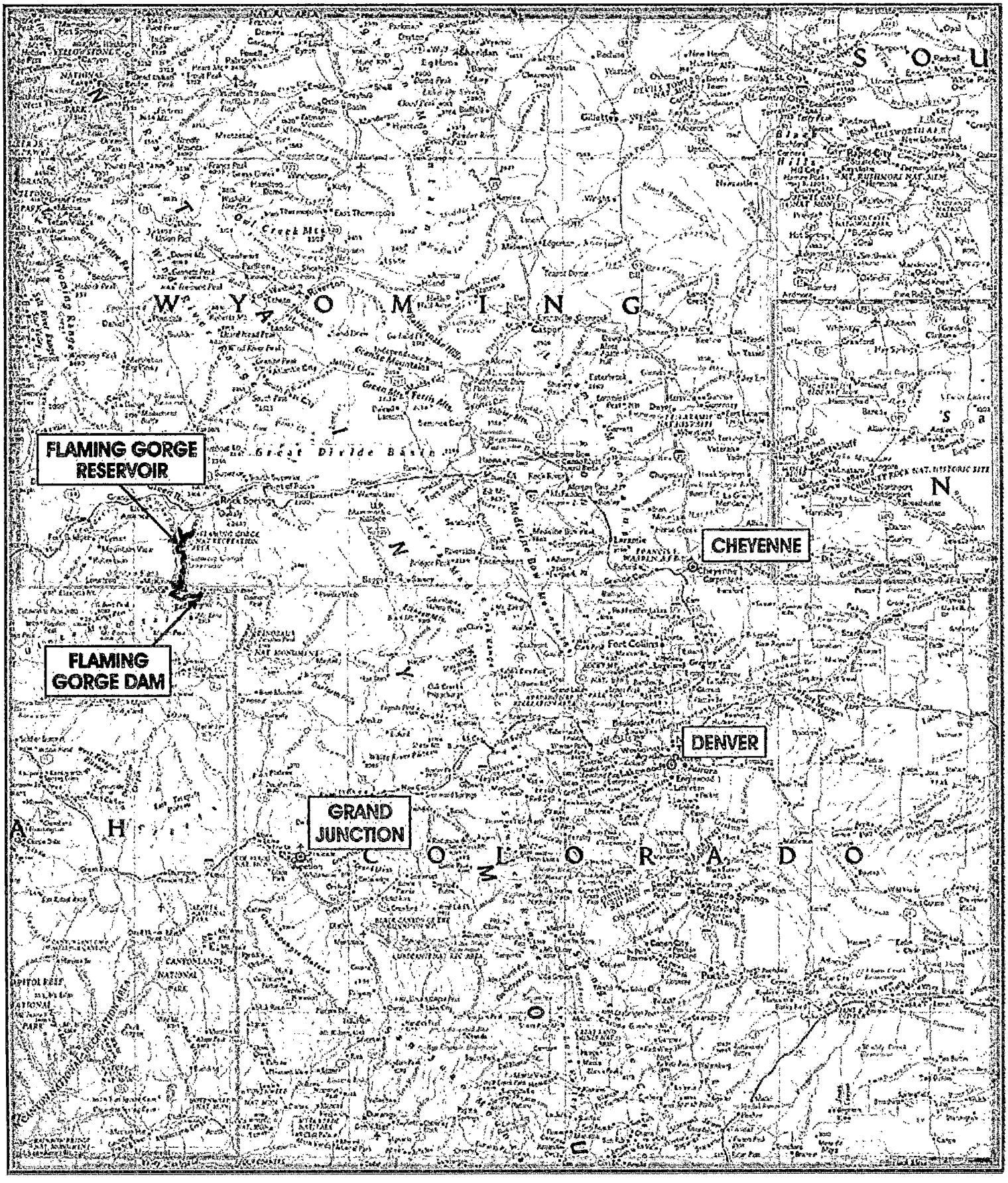
Allocated total				
Lytle Water	$50,000			
SWWRC/Dewberry	$75,000			
Karriet LLC	$15,000			
Total	$140,000	Total Appropriated	(Eight * $20K Each)	$160,000

Task	% Complete	Amount Needed to Complete	Lytle Water	SWWRC	Dewberry
1 Determine Need	90	$500	$500	$0	$0
2 Framework	100	$0	$0	$0	$0
3 Meetings	50	$14,500	$6,000	$5,000	$3,500
4 Modeling	15	$15,000	$15,000		
5 Infrastructure	80	$15,850	$2,500	$5,550	$7,800
6 Model Alts	80	$7,750	$3,500	$1,250	$3,000
7 Cost Estimates	85	$500	$500	$0	$0
8 Final Report	50	$15,000	$5,000	$5,000	$5,000
Total		**$69,100**	**$33,000**	**$16,800**	**$19,300**

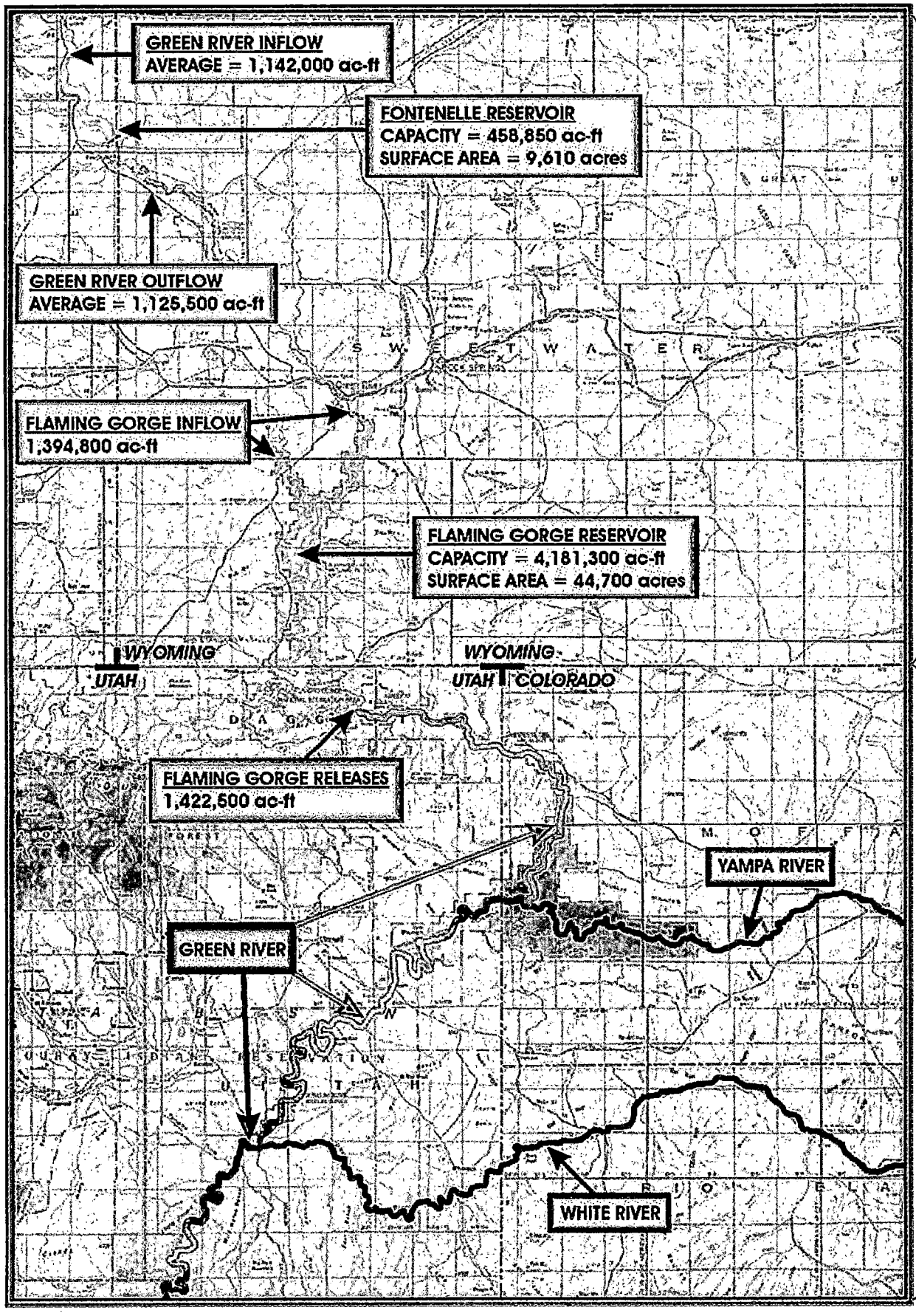
Expenses (Many color copies)	**Report Printing 30-50 copies**	**$3,000**	**(The estimated budget is for the period April 1st thru Summer, 2012)**
Sub-Total		**$72,100**	
Karriet LLC	**Estimated**	**$6,000**	**Future funds thru March, 2013**
Sub-Total		**$78,100**	
Minus Remaining Balance LWS Amend 1		**$14,000**	
Sub-Total		**$64,100**	
Minus Remaining Unallocated Coalition Funds		**$20,000**	

Sub-Total	$44,100
Amount Needed to complete Feas Study	$44,100
Contingency Amount	$35,900
Additional $'s per Entity - Coalition	$10,000

General Location Map



Green River System



Flow Availability

Environmental Protections (ROD, 2/16/06)

Potential Flaming Gorge Project Participants