RECLAMATION

Managing Water in the West

Newsletter

Arkansas Valley Conduit
Long-Term Excess Capacity Master Contract

Environmental Impact Statement
Fryingpan-Arkansas Project, Colorado

October 2011

The Bureau of Reclamation (Reclamation) is preparing an Environmental Impact Statement (EIS) for the Arkansas Valley Conduit (AVC), a proposed water supply project to serve the needs of communities in the lower Arkansas Valley, a pipeline (Interconnect) to convey water between the existing south outlet works and a future north outlet works at Pueblo Reservoir and the Long-Term Excess Capacity Master Contract (Master Contract), which would allow water storage in existing Reclamation reservoirs. This newsletter is the second of several planned periodic updates on EIS activities.

Research and Analysis Defines and Documents Purpose and Need

A key element in the preparation of the EIS addressing the AVC, Interconnect and Master Contract is the definition of the purpose as well as analysis and documentation of the needs driving each proposed action. The following summarizes the purpose and needs of each.

AVC to Meet Water Needs

The purpose of the AVC is to deliver water for municipal and industrial use within the boundaries of the Southeastern Colorado Water Conservancy District (Southeastern). Water supplied through AVC would serve two needs: 1) supplement or replace existing poor quality water; and 2) meet a portion of the AVC participants' projected water demands through 2070.

The 41 AVC participants share a need to meet federal and state drinking water standards and to provide better quality water to customers. Reliant almost exclusively on groundwater from aquifers, the participants' current water supply is characterized by salinity, sulfate, and in some cases, radionuclides in excess of water quality standards.

The Colorado Department of Health and Environment has served enforcement actions to13 AVC participants due to water quality violations which require participants to come into compliance with primary drinking water standards for radionuclides. The remaining water quality contaminants exceed secondary standards, which do not present substantial health issues but do affect water taste, color and odor.

The second need for the AVC is to help participants meet their responsibilities for acquiring and developing safe and reliable water supplies to meet the needs of existing and future residential, commercial and industrial customers.

The AVC would deliver to participants about 10,600 ac-ft of water per year to supplement or blend with existing supplies to meet 2070 water demands.

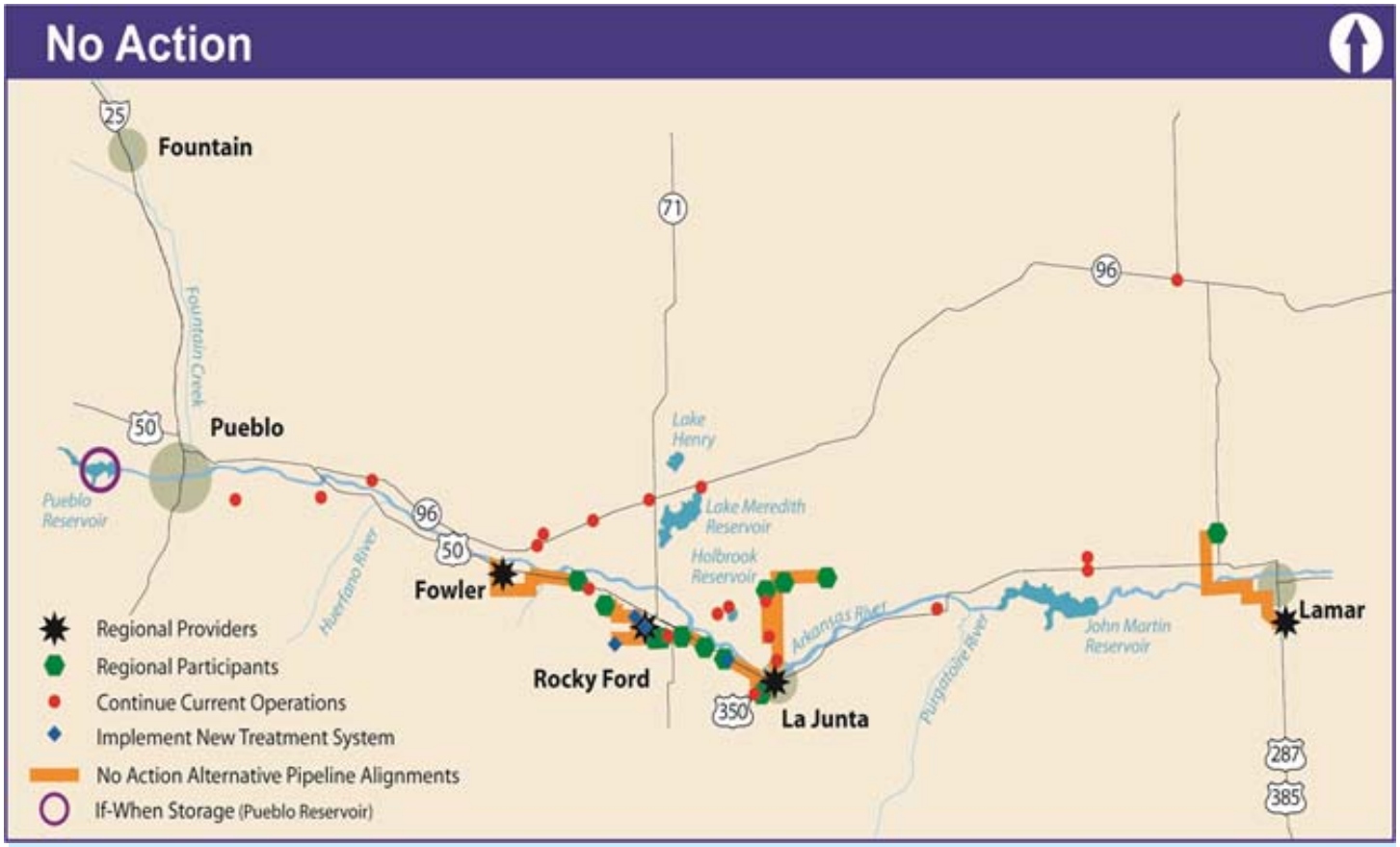
Interconnect for Redundancy

The purpose of the Interconnect is to provide a redundant means for release of municipal and environmental water from the outlet works at Pueblo Dam. The Interconnect would allow delivery of water from either the existing south outlet works or the future north outlet works (being constructed as part of the Southern Delivery System) of Pueblo Dam without loss of services for its participants. The Interconnect would only be used during routine maintenance or emergency outages.

(Continued on page 8)

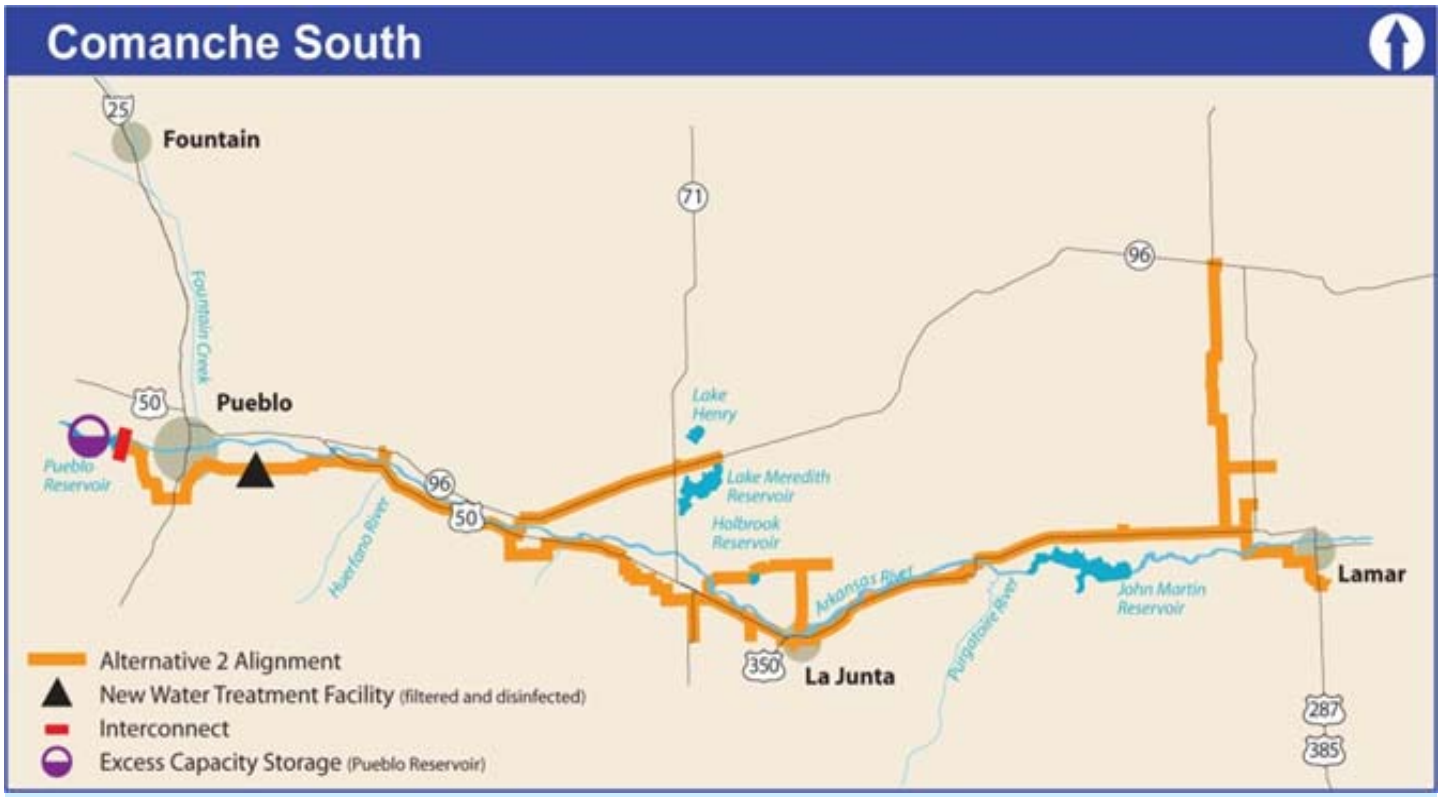
Seven Alternatives Designed to Address Purpose and Need

A structured alternative development and screening process identified a wide range of options and formulated them into a set of alternatives that address key issues. The process included analysis of all alternatives proposed by the public. The goal of this process was to identify a range of reasonable alternatives to meet the purpose and needs of the AVC, Interconnect and Master Contract. Seven alternatives, including a No Action Alternative, were identified for detailed analysis in the EIS and are summarized in this newsletter.



No Action Alternative

- Required by the National Environmental Policy Act, this alternative is the future without the AVC, Interconnect, and Master Contract.
- Meet water supply and water quality needs using regional water treatment systems or local independent systems:
  - Participants with existing water supplies and treatment systems that meet primary drinking standards would continue to use these supplies;
  - Participants under water quality enforcement actions would either upgrade water treatment facilities to meet primary drinking water standards, or regionalize with a larger entity; and
  - Existing facilities at Fowler, Rocky Ford, La Junta and Lamar would serve as regional water treatment plants; they may be expanded to serve additional regional customers.
- Do not construct the Interconnect.
- Do not issue the Master Contract. Participants would continue to seek temporary excess capacity contracts with Reclamation.



Comanche South Alternative

- Divert water from the existing Pueblo Reservoir south outlet works.
- Build a new pipeline along the existing Comanche Power Plant pipeline route south of the City of Pueblo and generally along Highway 50 east of Pueblo to Lamar. It would be about 235 miles long, with primary pipe spurs buried along Highway 96 between Manzanola and La Junta, and to serve Eads. Shorter spur pipelines would deliver water to AVC participants located near the main pipeline. Pipelines would range in diameter from 42 inches at the intake to 10 inches at some participants' tie-in locations.
- Construct storage tanks near Fowler and La Junta.
- Construct a new water treatment plant east of St. Charles Mesa to filter and disinfect water for delivery to participants.
- Deliver unfiltered water to the St. Charles Mesa Water District.
- Construct pumping stations downstream of the new water treatment plant and on the spur to Eads.
- Construct the Interconnect.
- Issue the Master Contract to provide for about 30,000 ac-ft of excess capacity storage in Pueblo Reservoir.

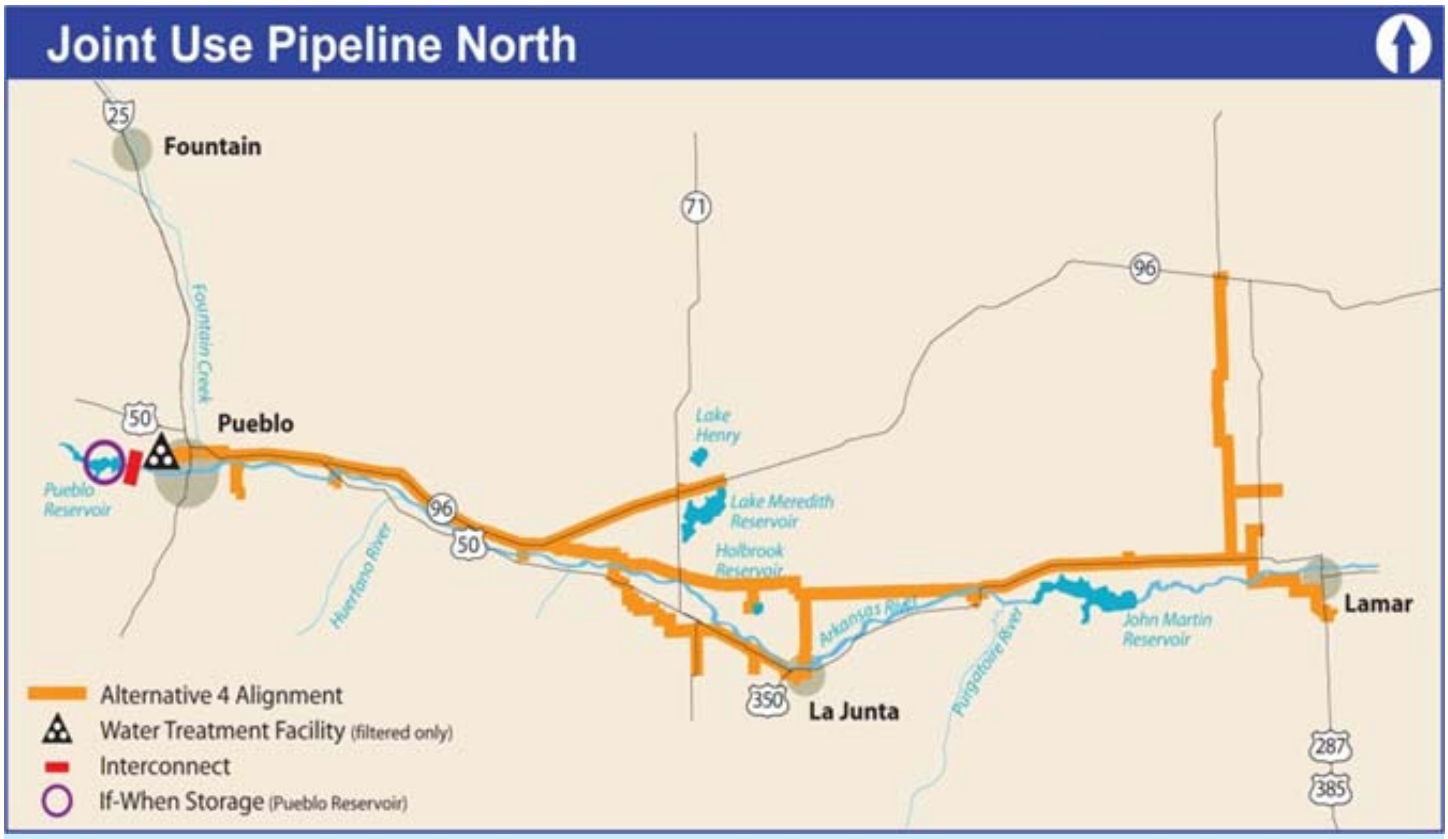
Pipeline route south of Pueblo near the existing Comanche Power Plant.

Pueblo Dam South Alternative

- Divert water from the existing Pueblo Reservoir south outlet works.
- Build a new pipeline from Pueblo Dam along Bessemer Ditch through the City of Pueblo and generally along Highway 50 east of Pueblo to Lamar. It would be about 230 miles long; diameter sizes and spurs would be as described for the Comanche South Alternative on page 3.

Pipeline route along Bessemer Ditch through the City of Pueblo.

- Construct storage tanks near Fowler and La Junta.
- Construct a new water treatment plant near South Road and 21st Street in St. Charles Mesa to filter water from the AVC. Disinfection would be provided by the participants at their delivery points.
- Deliver unfiltered water to the St. Charles Mesa Water District.
- Construct a pumping station on the south end of the pipeline spur to Eads.
- Do not construct the Interconnect.
- Issue the Master Contract to provide for about 30,000 ac-ft of excess capacity storage in Pueblo Reservoir



Joint Use Pipeline North Alternative

- Use excess capacity available in the existing Joint Use Pipeline from Pueblo Dam to about Pueblo Boulevard.
- Build a new pipeline downstream of Pueblo Boulevard to the existing Whitlock Water Treatment Plant. Build a new pipeline from the Whitlock Water Treatment Plant adjacent to the railroad on the north side of Highway 50. East of Pueblo, build the pipeline just north of the Arkansas River. The pipeline would be about 233 miles long; its sizes and spurs would be as described for the Comanche South Alternative on page 3.
- Construct storage tanks near Fowler and La Junta.
- Expand or construct a new water treatment plant at the existing Whitlock Water Treatment Plant to filter water from the AVC. Disinfection would be provided by the participants at their delivery points.
- Deliver filtered water to the St. Charles Mesa Water District.
- Construct pumping stations just downstream of the water treatment plant and on the spur to Eads.
- Construct the Interconnect.
- Do not issue the Master Contract.

Site for water treatment facilities near existing Whitlock Water Treatment Plant.

Pueblo Dam North Alternative

- Divert water from the existing south outlet works at Pueblo Reservoir.
- Build a new pipeline adjacent to the railroad on the north side of Highway 50 and just north of the Arkansas River east of Pueblo. The pipeline would be about 236 miles long; its sizes and spurs would be as described for the Comanche South Alternative on page 3.
- Construct storage tanks near Fowler and La Junta.
- Construct a new water treatment plant below Pueblo Reservoir on Reclamation property to filter water. Disinfection would be the responsibility of AVC participants at their delivery points.
- Deliver filtered water to the St. Charles Mesa Water District.
- Construct pumping stations at the foot of Pueblo Dam, at the water treatment plant and on the spur to Eads.
- Construct the Interconnect.
- Issue the Master Contract, providing for about 30,000 ac-ft of excess capacity storage in Pueblo Reservoir.

Approximate location of potential new water treatment plant on Reclamation property immediately southeast of Pueblo Dam.

River South Alternative

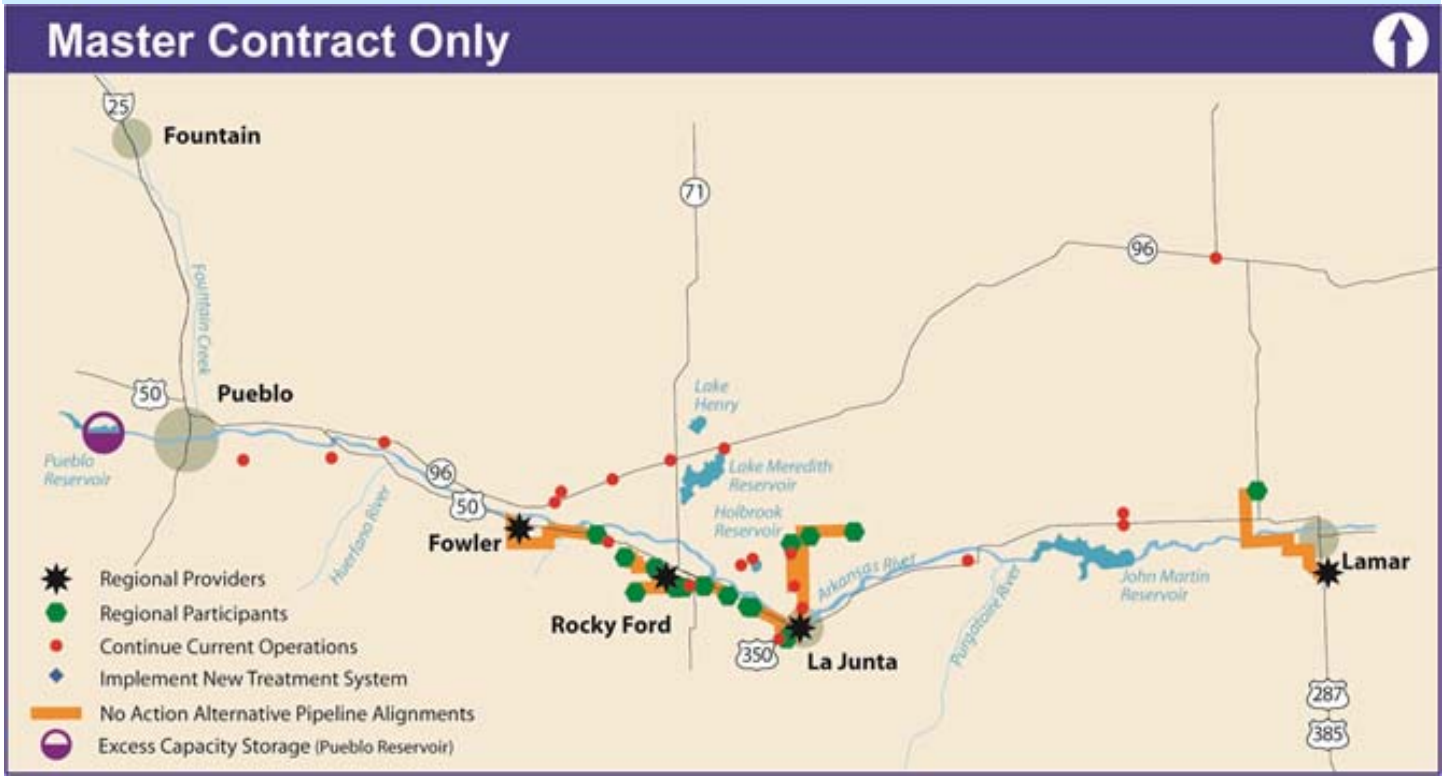
- Divert water from the Arkansas River just upstream of Fountain Creek near the existing St. Charles Mesa diversion structure and pump station.
- Construct a new pipeline from the Arkansas River parallel to the existing St. Charles Water District pipeline. East of Pueblo, the route would generally be south of the Arkansas River to La Junta, and north of the Arkansas River downstream of La Junta. The pipeline would be about 216 miles long; its sizes and spurs would be as described for the Comanche South Alternative on page 3.
- Construct storage tanks near Fowler and La Junta.
- Construct a new water treatment plant adjacent to the existing St. Charles Mesa Water Treatment Plant to filter and disinfect water.
- Deliver unfiltered water to the St. Charles Mesa Water District.
- Construct pumping stations at the point of diversion, just downstream of the new water treatment plant, and on the spur to Eads.
- Do not construct the Interconnect.
- Issue the Master Contract to provide for about 30,000 ac-ft of excess capacity storage at Pueblo Reservoir.

Approximate location of Arkansas River intake, downstream of boat course and upstream of Santa Fe Avenue.

The Master Contract would use excess capacity storage space in Pueblo Reservoir, which is space not being used to store Fryingpan-Arkansas Project water.

Master Contract Only Alternative

- Do not construct the AVC. Participants would pursue actions similar to those for the No Action Alternative, as described on page 2, to meet their water supply and quality needs.
- Issue the Master Contract to provide for about 30,000 ac-ft of excess capacity storage at Pueblo Reservoir.



Visit the EIS Website For More Information

Additional information about development of the AVC/Master Contract EIS is available on the project website:

www.usbr.gov/avceis/

(Continued from page 1)

Master Contract Provides Excess Capacity Storage

The purpose of the Master Contract is to use excess capacity storage in Pueblo Reservoir to help provide a reliable water yield through 2060. Master Contract participants are located throughout the Southeastern District and include both AVC and non-AVC participants.

Like AVC participants, Master Contract participants are responsible for developing and acquiring safe and reliable water supplies to meet customer needs. Through the Master Contract, they would be able to meet demand by storing water during times of water shortage, or by storing water for augmentation purposes when using groundwater.

Seven Alternatives: Different Approaches and Common Elements

While each alternative involves different component options, there are elements that they all hold in common:

- Water supplies, including Fryingpan-Arkansas Project water and return flows, existing or future agricultural to municipal water rights transfers, supplies from rotational fallowing programs by the Lower Arkansas Valley Water Conservancy District, and other miscellaneous water rights.
- Conservation, including active and passive conservation projects, by water supply customers;
- Construction activities (for alternatives with construction), including land acquisition and easements, construction techniques and miscellaneous components; and
- Schedule, including AVC construction and Master Contract implementation.

Trenchless construction techniques could be used to avoid disturbing major roadways, streams, and other resources.

The AVC would be a buried pipeline, typically using open cut installation methods.

Other Considered (and Eliminated) Alternatives

Reclamation considered a number of alternatives that were eliminated from further study in this EIS.

Eliminated alternatives did not meet the purpose and needs of the proposed actions; were not technically, economically, or logistically feasible; or had less favorable environmental characteristics.

Alternatives proposed by the public during the public scoping process were thoroughly reviewed and put through the same screening process as all other alternatives under consideration.

Clearing of deep-rooted plants, such as tamarisk, as a water supply option was eliminated because there is no legal mechanism for AVC to divert "saved" water from this type of action.

Next Steps: Public Hearings and Draft EIS Review

Reclamation used information gathered during the scoping process in development of alternatives and identification of environmental issues required for further study in the EIS process.

Reclamation is currently preparing sections of the Draft EIS that describe the existing environment and analyzing the impacts of the alternatives. This information will culminate in a Draft EIS, scheduled to be released for public review in August 2012.

Following release of the Draft EIS, Reclamation will host a series of public hearings to gather comments. The times, dates and locations of those meetings will be published on the AVC/Master Contract website: www.usbr.gov/avceis/

The graphic on page 10 depicts the complete process and projected timeline for EIS development and review, which culminates with a Record of Decision.

For Questions…

For questions specific to the proposed actions or the EIS please contact:

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Environmental Impact Statement Process

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