



— BUREAU OF —
RECLAMATION

Lake Powell Pipeline Project

Virtual Public Meetings

July 8 and 9, 2020 at 6pm MDT

Lake Powell Pipeline Project Background

- Population growth in southern Utah over multiple decades caused water managers to address, through planning and feasibility studies, the future water needs in the area
 - Projected population growth in Washington County from 186,600 to 468,800 by 2060 (Kem C Gardner Institute 2017)
- Washington County Water Conservancy District (WCWCD) will need an additional 86,000 acre-feet of water per year to meet future demands
- The Lake Powell Pipeline (LPP) Project was the result of those studies and would allow Utah to use its water apportioned from the Compacts. Rely on a single source (Virgin River Basin) to meet current demands



Lake Powell Pipeline Project Background

- Project officially began in 2008 with a NOI in the Federal Register
 - Originally 3 Project Participants; now only the Washington County Water Conservancy District
- During the years from 2008 – 2019
 - Proponent completed 23 studies in 2016, updated them in 2019
 - Proponent removed power generation components from the project in 2019 and withdrew their license application from FERC
- Reclamation was designated the lead federal agency for NEPA by the Department of the Interior on October 28, 2019
- Reclamation and the other federal agencies are not proponents or opponents of the LPP project.



Purpose of the Proposed Project

The purpose of the Proposed Project is to deliver a reliable annual yield of approximately 86,000 acre-feet of water per year from outside the Virgin River Basin into Washington County to meet projected water demands in 2060



Project Location

Lake Powell Pipeline
Project Area

Colorado
River

Lake Powell



Alternatives Considered But Eliminated

- **Structural Alternatives**

- 7 alternatives with differing alignments, considered infeasible due to significantly higher construction costs, operation and maintenance costs, and hydraulic and geotechnical limitations

- **Water Conservation-based Alternatives**

- 2 alternatives with emphasis on aggressive water conservation, greater reuse, and conversion of agricultural water to municipal and industrial purposes
- Considered in the DEIS, but eliminated because it did not meet the purpose and need, technically infeasible, and/or would require aggressive measures to meet conservation goals



Alternatives: No Action Alternative

- Pipeline would not be built, no Resource Management Plan (RMP) Amendment, and no water exchange contract, no ROWs needed
- Continue to manage existing water supply (Virgin River Basin)
- Future planned projects independent of LPP
- The No Action Alternative does not meet the Purpose and Need



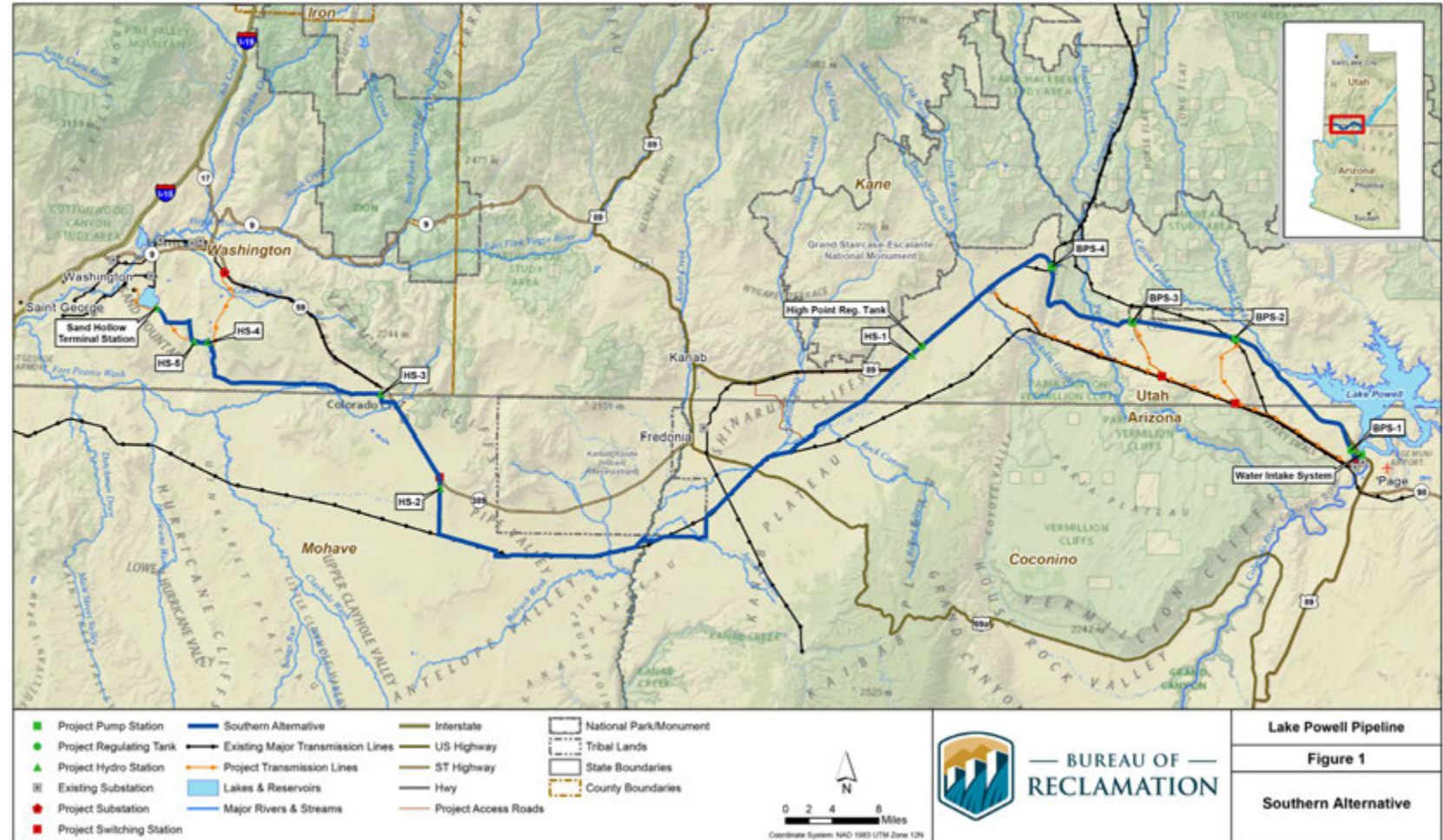
Alternatives: Southern Alternative (Preferred)

141-mile pipeline

Follows Energy
Corridor

Crosses ACEC

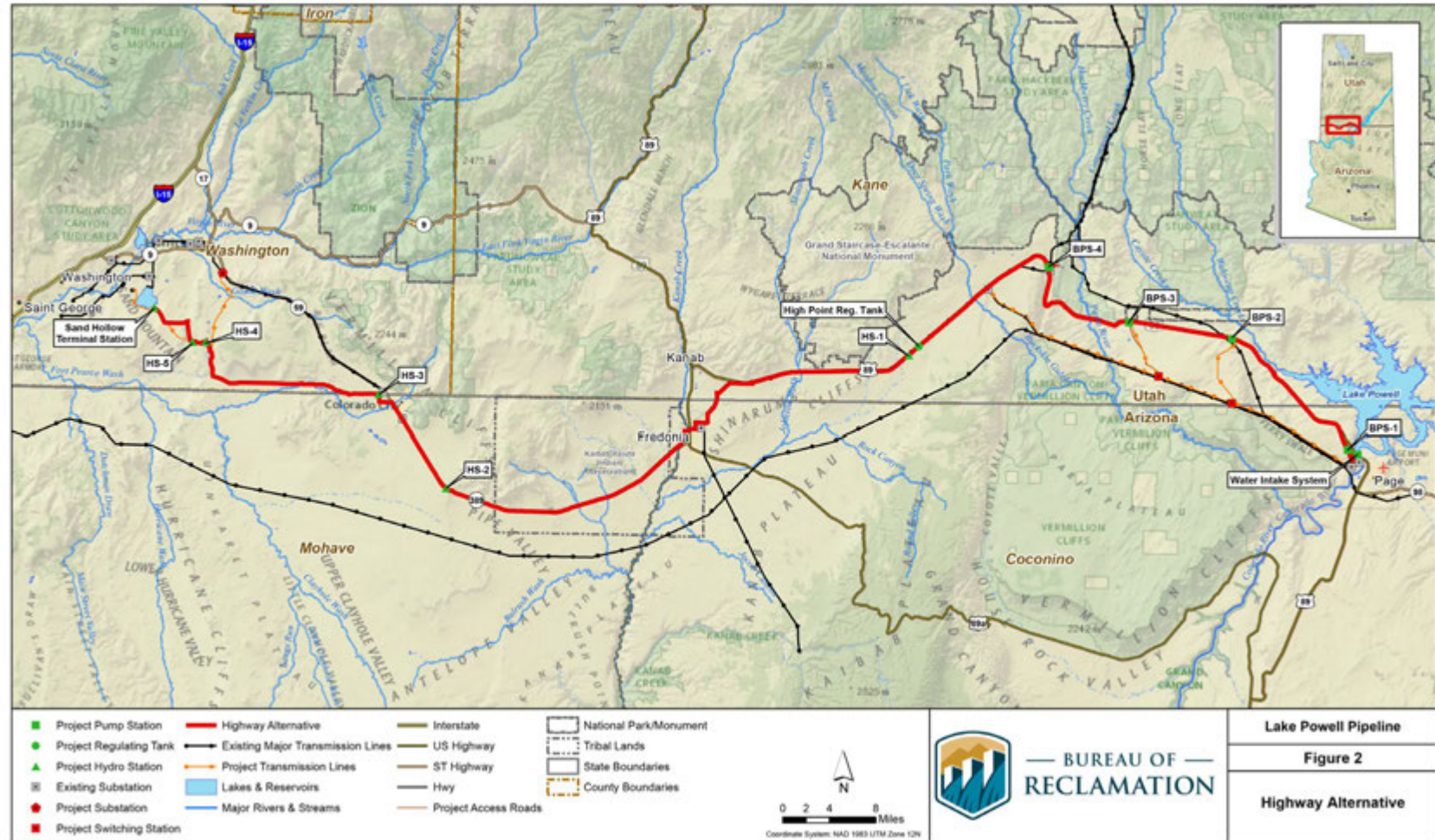
Agency	Decision(s)
BIA	No decision
BLM	ROW grants and RMP amendment
NPS	ROW permit
Reclamation	Water exchange contract and easement
USFWS	No decision



Alternatives: Highway Alternative

134-mile pipeline
Crosses Kaibab Indian Reservation

Agency	Decision(s)
BIA	ROW grant
BLM	ROW grants
NPS	ROW permit
Reclamation	Water exchange contract and easement
USFWS	No decision



Southern Alternative - Conformance with BLM RMPs

- The proposed LPP is in conformance with BLM Utah RMPs. The proposed LPP is not in conformance with the BLM Arizona Strip RMP, so the RMP needs to be amended
- The RMP specifies that land use authorizations (e.g. a right-of-way) can only be allowed within the Kanab Creek Area of Critical Environmental Concern (ACEC) if no other "reasonable" alternative exists. The Southern Alternative crosses the ACEC. The Highway Alternative does not cross the ACEC and is a reasonable alternative
- The RMP includes guidelines for visual resource management (VRM) that should be clarified for the requirements where the ACEC and utility corridor overlap to allow for major modifications such as the proposed LPP



Southern Alternative - Sub-alternatives for BLM Arizona Strip RMP Amendment

BLM has identified 3 sub-alternatives to amend the RMP that would allow the Southern Alternative to be approved and appropriate rights of way to be issued by the BLM

Sub-alt 1

Would resolve the RMP conformance issue by removing the requirement that LPP can only go through the ACEC if no "reasonable alternative" is available

Would clarify that where the utility corridor crosses the ACEC, the VRM Class is IV (major modifications allowed). The LPP does deviate from the utility corridor within the ACEC and in the current RMP would need to meet VRM Class II in this area (level of change to the landscape must be low)

Sub-alt 2

Would resolve the RMP conformance issue by shrinking the size of the ACEC so it no longer overlaps with the utility corridor
The LPP would deviate from the utility corridor into a VRM Class 3 area (moderate change to the landscape allowed)

Sub-alt 3 (BLM's preferred)

Would resolve the RMP conformance with the same changes as sub-alt 1

Would further shift the utility corridor identified in the RMP to the north so the LPP would be fully within the corridor and subject to VRM Class IV only



Cost Comparisons by Alternative

Pipeline Alternative	Construction (millions)	Interest during Construction (millions)	Present Value of Annual Operation, Maintenance, Replacement, and Power (millions)	Estimated Total Project Costs
Southern	\$1,480.5	\$105.2–\$220.4	\$312.9	\$1,898.6–\$2,013.8
Highway	\$1,433.0	\$101.8–\$213.3	\$312.9	\$1,847.7–\$1,959.2
No Action	\$82.5	\$5.9	\$16.0	\$104.4



Some Resources of Concern

- **Hydrology (Lake Powell and Green/Colorado/Virgin Rivers)**
 - Climate change effects and new diversions
- **Cultural Resources**
 - Impacts to over 200 cultural resources
- **Ethnographic Resources**
 - Sites considered sacred by the Tribe would be impacted
- **Aquatic Invasive Species (quagga mussel)**
 - EOs 13112 and 13751 outline the need to minimize spread of Aquatic Invasive Species and require a determination for an inter-basin transfer
- **Threatened and Endangered Species**



Other Concerns

- **Unresolved Colorado River Compact Issues**
 - Lower Basin States of California and Arizona raised the issue during scoping of the potential need for legislation to use Upper Basin water in the Lower Basin
 - Utah has made contact with multiple states in the upper and lower basin, seeking formal means to resolve the issue
- **Conversations and negotiations with the Kaibab Tribe are ongoing**
 - No formal agreements have been reached

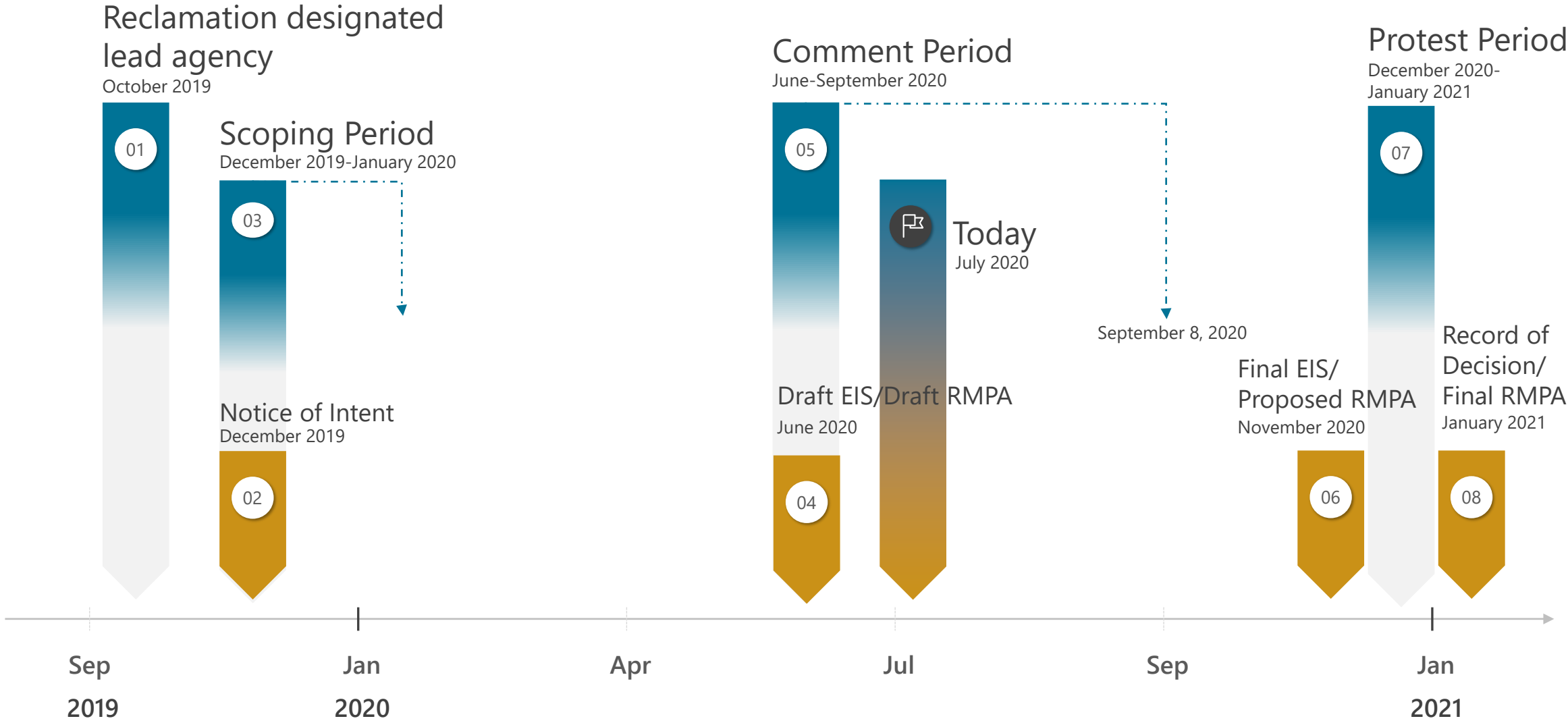


Upcoming Schedule

- **Virtual Public Scoping Meetings – July 8 and 9**
 - 6 pm both nights
 - Power Point Presentation
- **Comment period ends September 8, 2020**
- **Notice of Availability for the Final EIS expected November 27, 2020**



Overall - NEPA Compliance Schedule





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