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# Henrys Fork Basin Study Storage Alternatives

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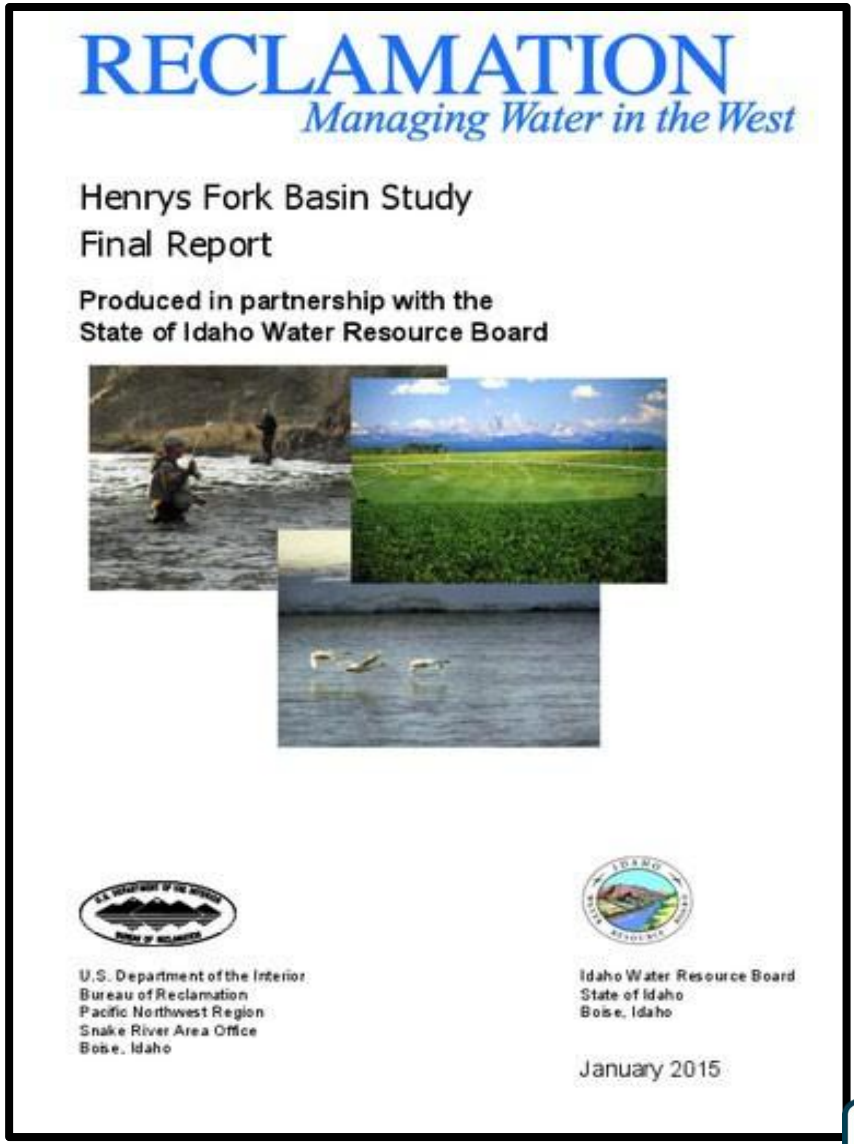
# Henrys Fork Basin Study Objectives

Explore potential action alternatives to:

- Address complex water supply and management challenges.
- Support Eastern Snake Plain Aquifer Comprehensive Aquifer Management Plan and Idaho State Water Plan goals.
- Reduce and mitigate for risks to water supply from drought and climate variability by developing water supplies, improving water management, and sustaining or improving environmental quality and ecological resiliency.



# Study Boundary

- Henrys Fork River is on of the largest tributaries to the Snake River – largest tributaries are the Fall and Teton Rivers
- Henrys Fork Basin provides irrigation water to over 280,000 acres and sustains a world-class trout fishery.
- Western portion overlies the ESPA and it contributes about 25% of upper Snake River supply and contributes to groundwater recharge in local aquifers and the ESPA.

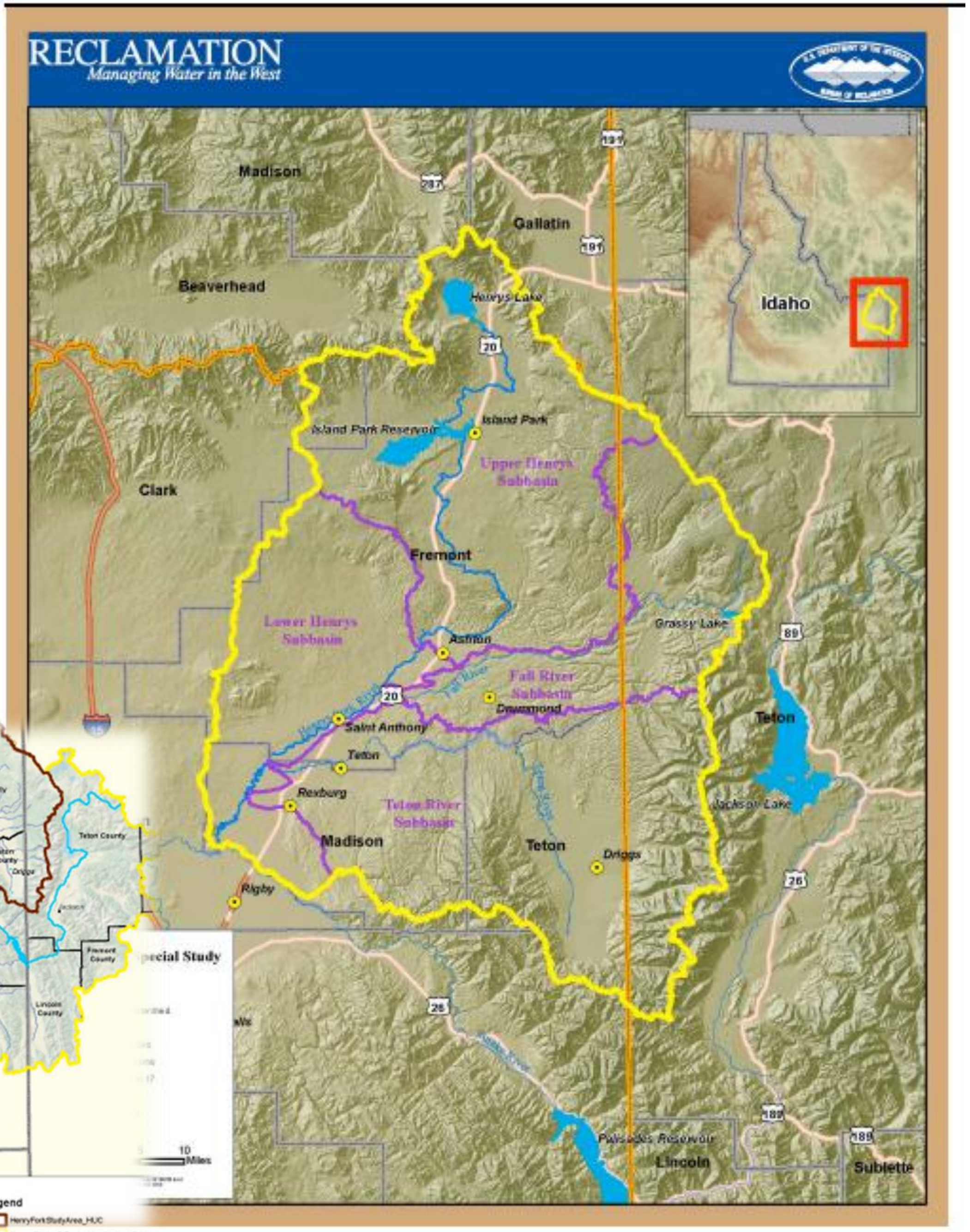



Figure 1. Map of Henrys Fork River basin and its subbasins, major tributaries, and reservoirs.

# Collaboration & Outreach

- Reclamation collaborated with the Henrys Fork Watershed Council to form a Workgroup that included Council members and other interested stakeholders.
- Watershed Council includes State and Federal agencies, irrigation entities, conservation organizations, universities, and the farming community.
- Watershed Council's Native Trout Subcommittee and a smaller set of Council members provided significant review and input.
- Reclamation, IWRB representatives, Workgroup members, and other interested parties worked on study for more than 3 years.
- HFBS website contains meeting notes, presentations, research materials, public comments/responses, and reports generated during the Basin Study.

# Alternative Formulation & Screening

- 51 alternatives identified
- Screening and grouping with Workgroup input reduced the number to 12 alternatives that were evaluated in the final report.
- Alternatives were grouped into four general categories: surface storage, managed aquifer recharge, water markets, and water conservation/demand reduction.
- Further compared all alternatives based on 1) effectiveness; 2) costs; 3) effects; 4) local acceptance by stakeholders.



**Table 8. Evaluation categories, factors, and scoring (rating) system.**

| | Score of 1 | Score of 2 | Score of 3 |
|---|---|---|---|
| **Water Supply** | | | |
| Hydrologic potential (average annual in acre-feet) | High potential: greater than 100,000 acre-feet | Moderate potential: 30,000-100,000 acre-feet | Low to no potential: less than 30,000 acre-feet |
| Restrictions on hydropower development (i.e., IWRB or Northwest Power and Conservation Council [NPCC] designation) | No restrictions | Moderate: NPCC restrictions | IWRB or both IWRB & NPCC restrictions |
| Flood control potential | High potential | Moderate potential | Low to no potential |
| **Natural Environment** | | | |
| Wildlife habitat (i.e., big game winter range and big game migration corridors) | Low to no constraints | Moderate constraints: e.g., adverse but not significant or significant but mitigable adverse impact | High constraints: e.g., significant impact not subject to mitigation |
| ESA-listed species, including At-Risk (U.S. Forest Service and Bureau of Land Management Sensitive Species and Idaho Species of Greatest Conservation Need), and threatened, endangered, candidate and experimental nonessential species | | | |
| Wetland/habitat values, including National Wetlands Inventory (NWI) wetlands | | | |
| State aquatic species of special concern (i.e., Yellowstone cutthroat trout, presence and conservation/management tier) | | | |
| Special designation (i.e., Bureau of Land Management/U.S. Forest Service eligible stream, State natural river, State recreational river, and designated wilderness) | | | |
| **Socioeconomic Environment** | | | |
| Land management (i.e., private, Federal or State landownership and presence of conservation easements) | Low to no constraints | Moderate constraints: e.g., adverse but not significant or significant but mitigable adverse impact | High constraints; e.g., significant impact not subject to mitigation |
| Recreation/economic value (i.e., boating, fishing, hunting, Yellowstone National Park, guiding/outfitting, scenic/natural features, cultural/historic resources, and developed recreation facilities such as campgrounds and trails) | | | |
| Infrastructure (i.e., roads, utility lines, structures, habitation) | | | |

# Surface Storage - Final Screening

- 28 surface storage options initially identified
- 15 candidate surface storage sites were evaluated and scored in preliminary screening process
- 7 sites were carried forward into the full study – Sites that had fewer constraints or design challenges

**Table 1. Potential surface storage sites in Henrys Fork River basin.**

| Alt # | Name | Estimated Storage Potential (AF)[a] | On-stream | Off-stream[b] | Existing | Impounded Drainage(s) | Off-stream Water Source(s)[c] |
|---|---|---|---|---|---|---|---|
| 1 | Ashton Dam Enlargement | 29,000-40,000 | ✓ | | ✓ | Henrys Fork River | |
| 2 | Bitch Creek | 142,000-210,000 | | ✓ | | Bitch Creek | Teton River, Falls River, Conant Creek |
| 3 | Blackfoot Dam | | | | ✓ | | |
| 4 | Boone Creek | 80,000-83,000 | | ✓ | | Boone Creek | Falls River |
| 5 | Conant Creek | 20,000-40,100 | | ✓ | | Conant Creek | Bitch, Squirrel & Boone Creeks and Falls River |
| 6 | Driggs | 50,000 | ✓ | | | Teton River | |
| 7 | Felt Dam | 14,500-35,000 | | | ✓ | Teton River | |
| 8 | Generic Reservoir in Flat Land | NA | | ✓ | | | |
| 9 | Grassy Lake | NA | | | ✓ | | |
| 10 | Harrops Bridge/Tetonia | 590,000 | ✓ | | | Teton River | |
| 11 | Horseshoe Creek | 60,000 | | ✓[d] | | Horseshoe Creek[d] | Teton River[d] |
| 12 | Howell Ranch | 30,000-32,000 | | ✓ | | Rock Creek, Porcupine Creek | Falls River, Robinson Creek |
| 13 | Island Park Enlargement | 8000 | ✓ | | ✓ | | |
| 14 | JY Ranch | 49,000-80,000 | | ✓ | | Rock Creek, Shaefer Creek | Falls River, Porcupine Creek, Robinson Creek |
| 15 | Lane Lake | 69,000-70,000 | | ✓ | | dry basin north of Teton River | Bitch Creek, Conant Creek, Fall River, Teton Creek |
| 16 | Lower Badger Creek | 70,000-73,000 | | ✓ | | Badger Creek | Teton River, Bitch Creek |
| 17 | Marysville Headworks | 38,000-56,000 | ✓ | | | Falls River | |
| 18 | Moody Creek (Webster Dam) | 46,000-50,000 | | ✓ | | Moody Creek | Teton River, Canyon Creek |
| 19 | Moose Creek | 60,000 | | ✓ | | Moose Creek | Henrys Fork Snake River |
| 20 | Park Lake | 37,000-40,000 | | ✓ | | Upper Rock Creek | Falls River, Belcher River |
| 21 | Robinson Creek | 70,000 | | ✓ | | Robinson Creek, Bear Creek | Falls River, Fish Creek |
| 22 | Spring Creek (Canyon Creek) | 30,000-32,000 | | ✓ | | Spring Creek (tributary to Canyon Creek) | Bitch Creek, Canyon Creek, Teton River |
| 23 | Squirrel Creek | 126,000-130,000 | | ✓ | | Squirrel Creek | Conant Creek, Boone Creek, Falls River |
| 24 | Squirrel Meadows (Wyoming) | 10,000 | | ✓ | | tributary to Squirrel Creek | Boone Creek |
| 25 | Teton (rebuild or new site) | 200,000 (active) | ✓ | | | Teton River | |
| 26 | Teton Creek (Alta Project) | 3,424 | | ✓ | | Teton Creek | |
| 27 | Upper Badger Creek | 49,000-50,000 | | ✓ | | Badger Creek | Teton River |
| 28 | Warm River | 75,000 (active) | ✓ | | | Henrys Fork Snake River, Warm River, Robinson Creek | |

# HFBS: Surface Storage Alternatives Common Conclusions & Considerations

- Provides flexibility for addressing water needs (where and when water is needed)
- Can help address water needs for in-basin and out-of-basin uses (agriculture, DCMI, mitigation of groundwater pumping, ecological needs, etc.)
- Climate change analysis in the basin indicated precipitation in winter may increase and improve reliability of fill in existing and new storage facilities. Storage alleviates some effects of climate change by making water available for extended irrigation season.
- When developing new storage, consideration should be given to mitigating impacts on downstream ecosystems – new storage would largely capture peak runoff; consider adaptation of facilities the inhibit fish migration; review impacts to river environments
- Water rights – new storage will be junior to senior water rights on the system.

# HFBS: Surface Storage Alternatives Common Conclusions & Considerations

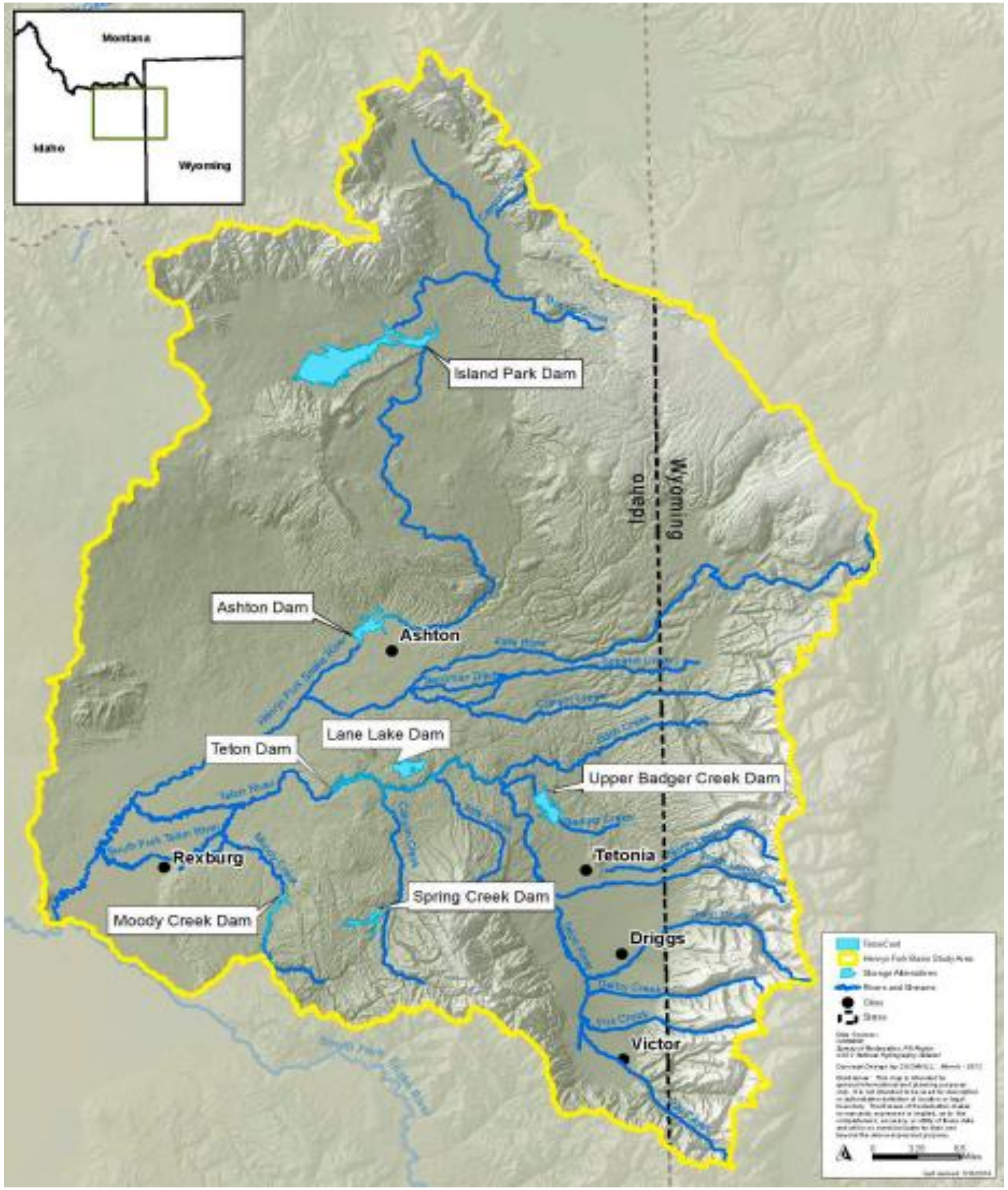
- Impact to Water Budget:
  - Water stored could be used to satisfy unmet irrigation needs in the Lower Watershed irrigated area by diverting and storing water during the storage season until needed in more critical, higher demand periods in the summer and early fall.
  - The out-of-basin water budget would be reduced during the peak flow period; however, the stored water could be used to meet agricultural needs, municipal and industrial needs, ecological needs, or groundwater recharge during the low baseflow period.
  - Reservoir releases may be coordinated with irrigation deliveries to augment late summer streamflows and help meet ecological instream targets.
- Many alternatives contain core conservation population of YCT. A new reservoir may increase likelihood of the introduction of nonnative fish.
- For many alternatives, may be impacts on big game winter range and migration corridors of one ESA-listed threatened species (grizzly bear) and one candidate species (wolverine).

# HFBS: Surface Storage Analyses Limitations/Assumptions

- Alternatives analyses performed for planning purposes – would need to be refined and escalated to current dollars.
- Utilized available geologic, soil mapping, and geotechnical literature and reports.
- Site alignments and canal and pipeline routes were based on professional judgement and available information.
- Hydrologic, reservoir seepage/evap losses, and environmental impacts require more detailed investigation.
- Cost estimates are preliminary and intended for comparative purposes. Do not include design, NEPA, land acquisitions, or other development costs.
- Water rights and water supply – additional review of water availability and water right priority/system operations required.

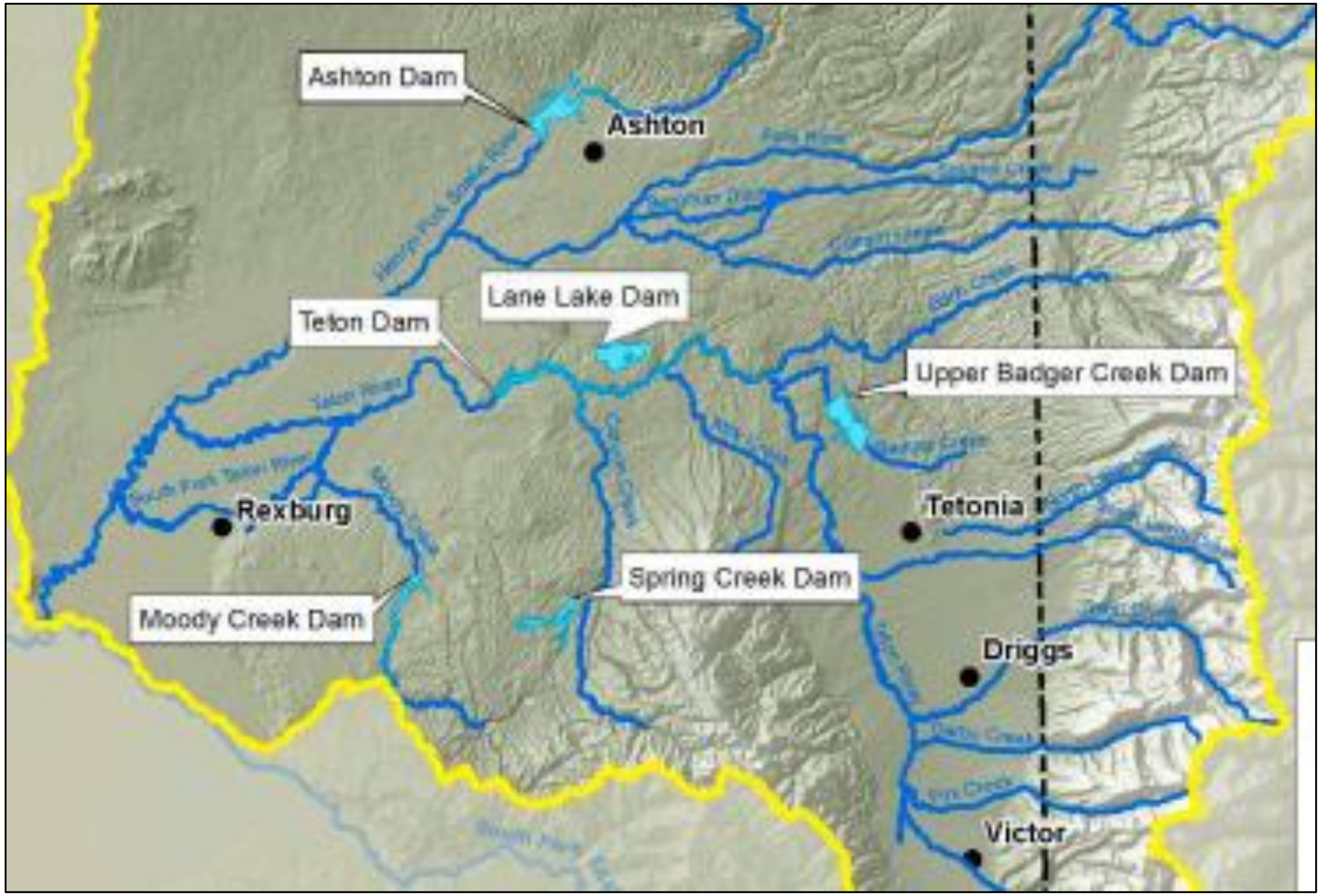
# Surface Storage Sites

- Spring Creek Dam (new)
- Upper Badger Creek Dam (new)
- Moody Creek Dam (new)
- Island Park Reservoir Increase
- Ashton Dam Raise
- Lane Lake Dam (new)
- Teton Dam



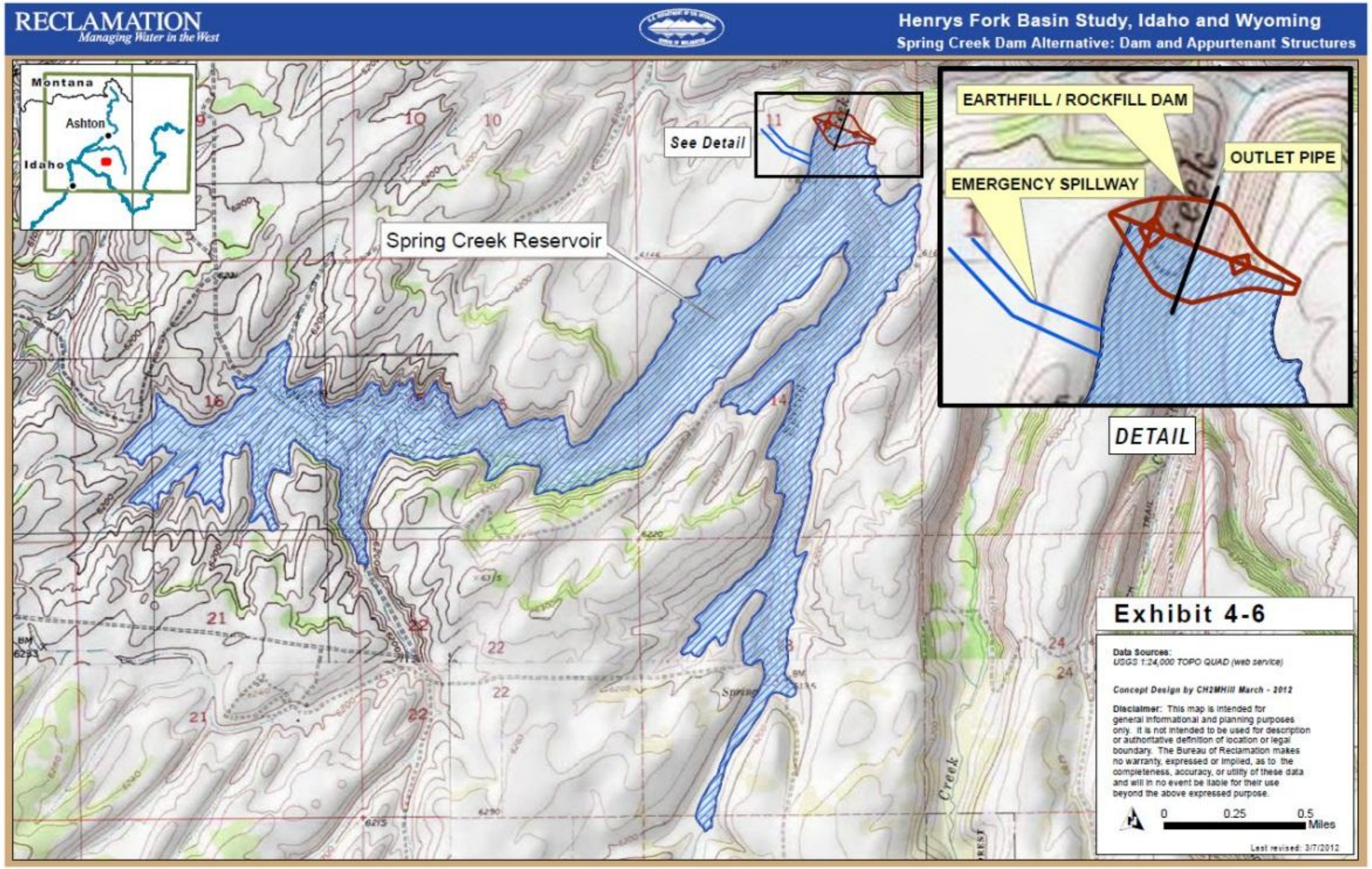
# Spring Creek Dam

- Location: Spring Creek headwater tributary as it joins Canyon Creek
- Water Source: Spring Creek and Canyon Creek
- New onstream dam

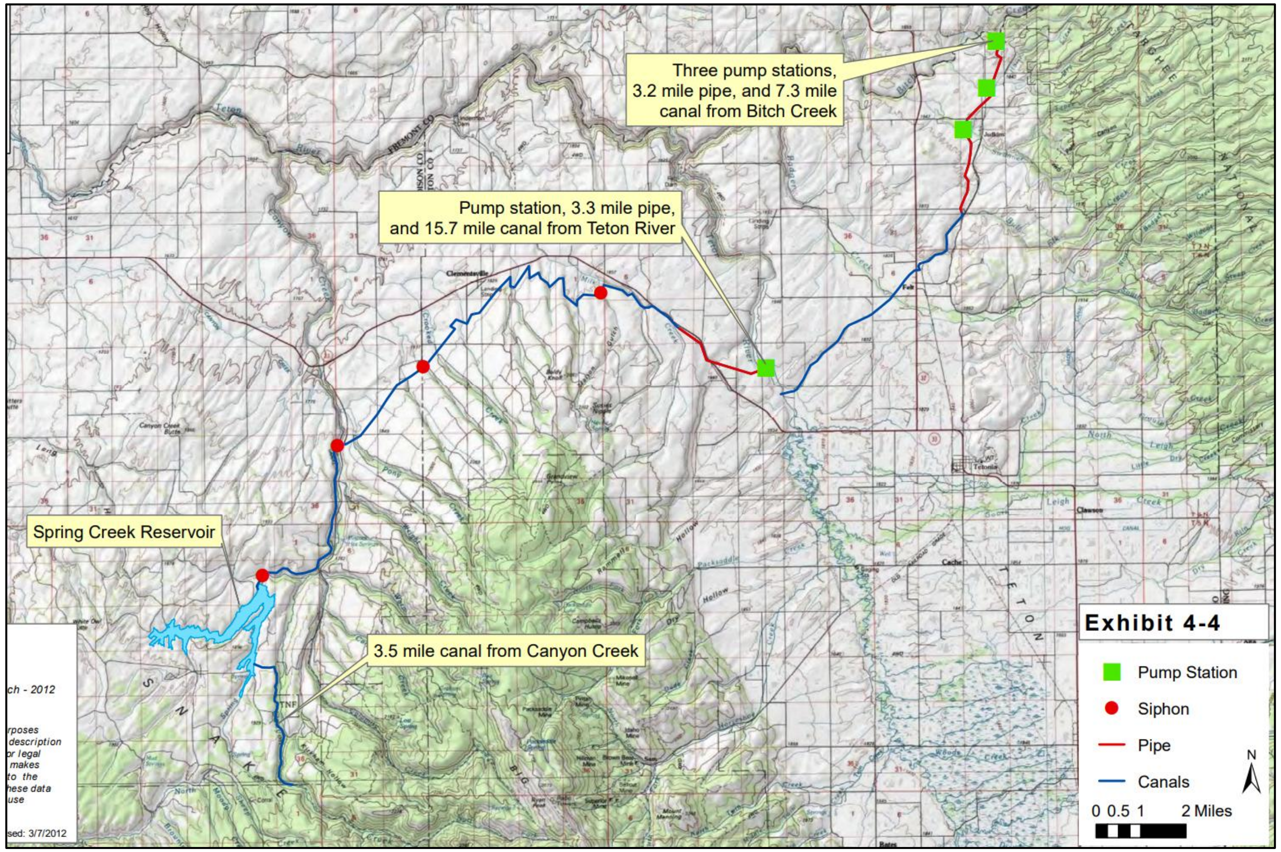


# Spring Creek Dam

- Reservoir: 20,000 ac-ft; max surface area 540 acres
- Volume: 10,800 ac-ft avg annual based on runoff availability
- Facility: 180 ft tall, 120 ft long dam
- Source: Spring and Canyon Creeks
- Located on private lands
- $41.76 million
- $3,900/ac-ft



# Spring Creek Dam

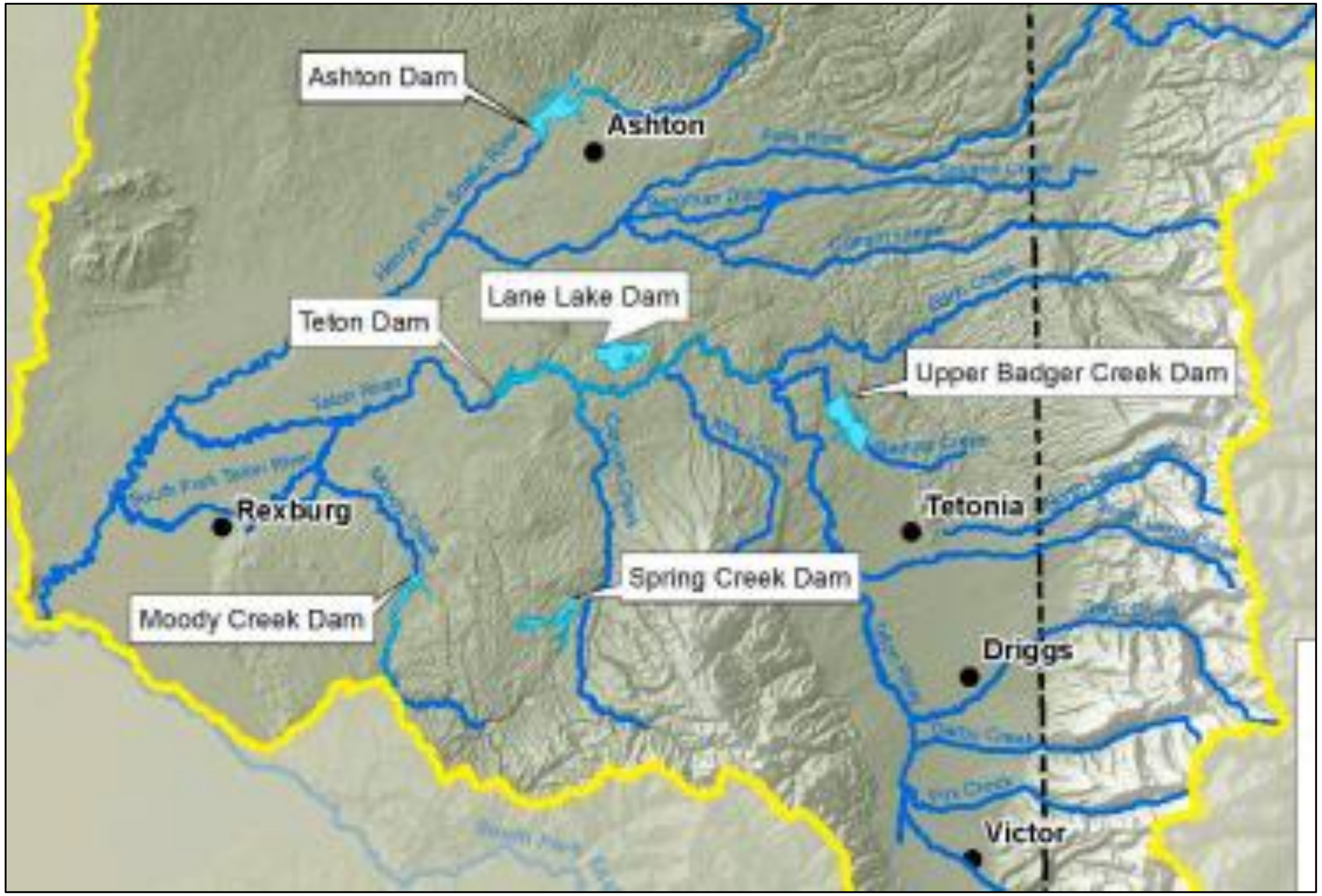



*Various water sources and conveyance options evaluated*

- Multiple alternatives evaluated:
  - Costs may be reduced by constructing a smaller reservoir, which only stores the 10,800 acre-feet of estimated annual runoff.
  - The more costly options (for 20 kaf capacity) would require expensive conveyance systems and were eliminated from consideration, including pumping from the Teton River.
- Key Points from Evaluation and Feedback:
  - Concerns about an impoundment to a free-flowing creek and impacts to YCT conservation area.
  - Provides water in Teton River drainage; however, support limited due to relatively small yield, high cost, and small contribution to larger water needs.

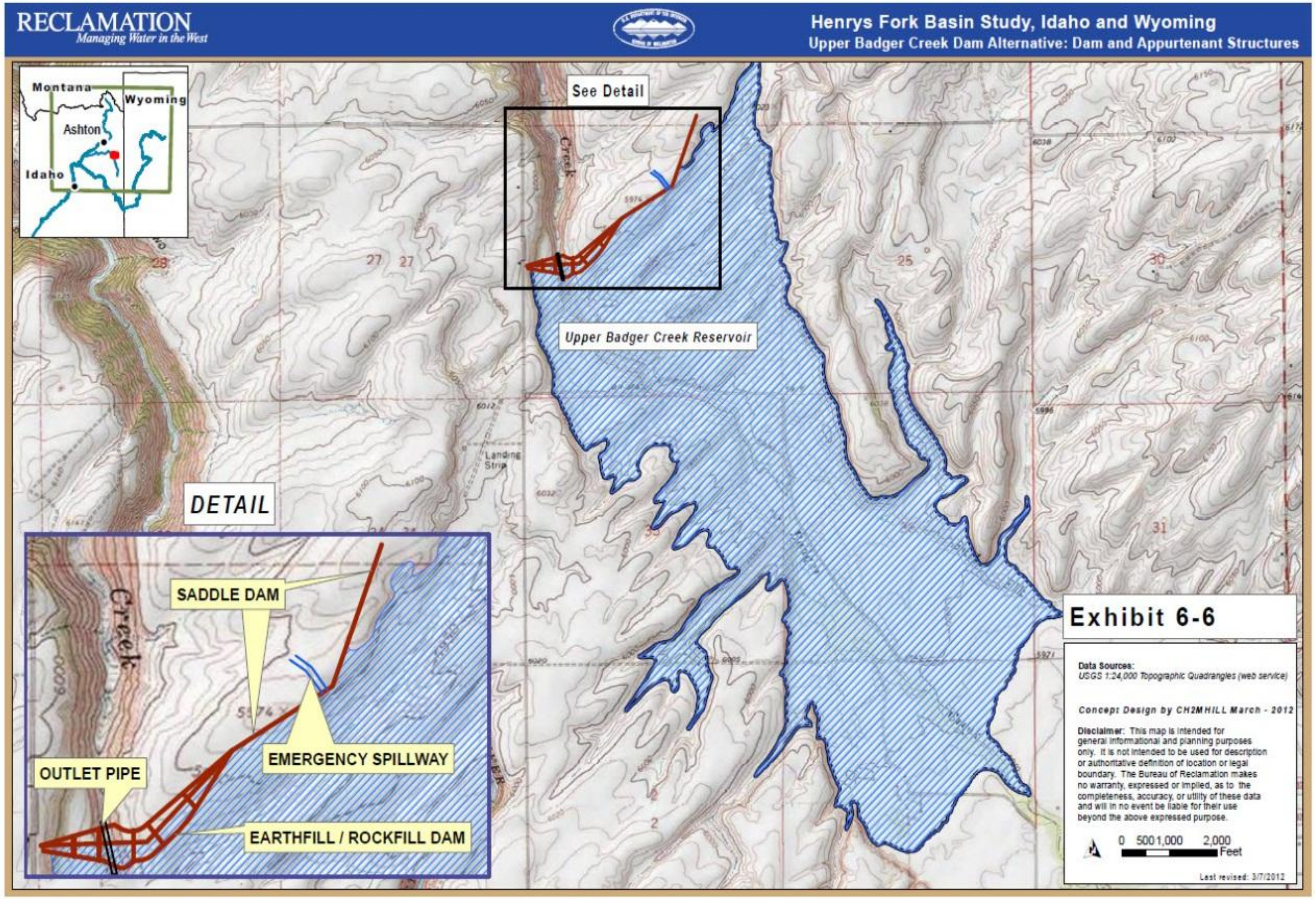
# Upper Badger Creek Dam

- Location: Teton River watershed on Badger Creek, approx. 5 miles upstream Teton River.
- Water Source: Badger Creek and pumped from Teton River
- New onstream dam



# Upper Badger Creek Dam

- Reservoir: 47,000 ac-ft; max surface area 520 acres
- Volume: 47,000 ac-ft avg annual based on runoff availability
- Facility: 290 ft tall, 2,400 ft long dam
- Source: Badger Creek and pumped from Teton River
- $128.9 million
- $2,700/ac-ft



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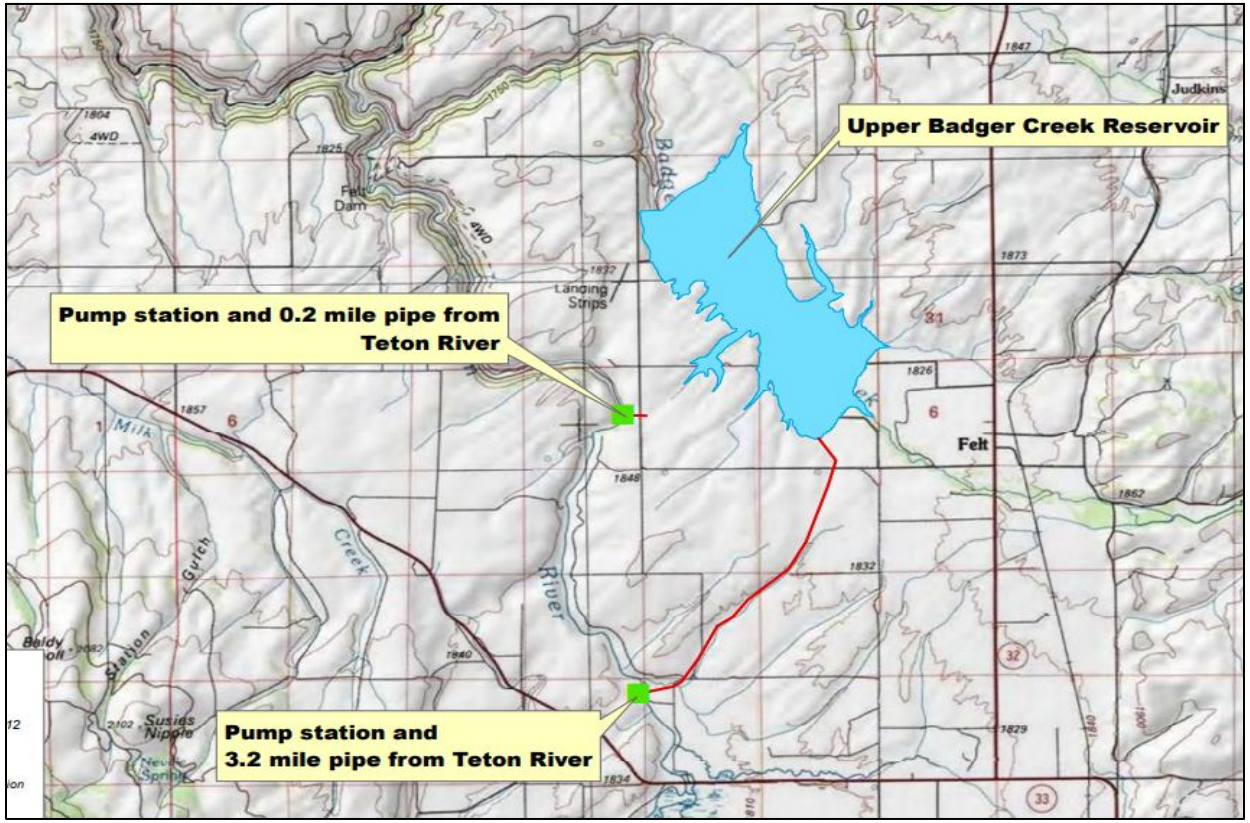


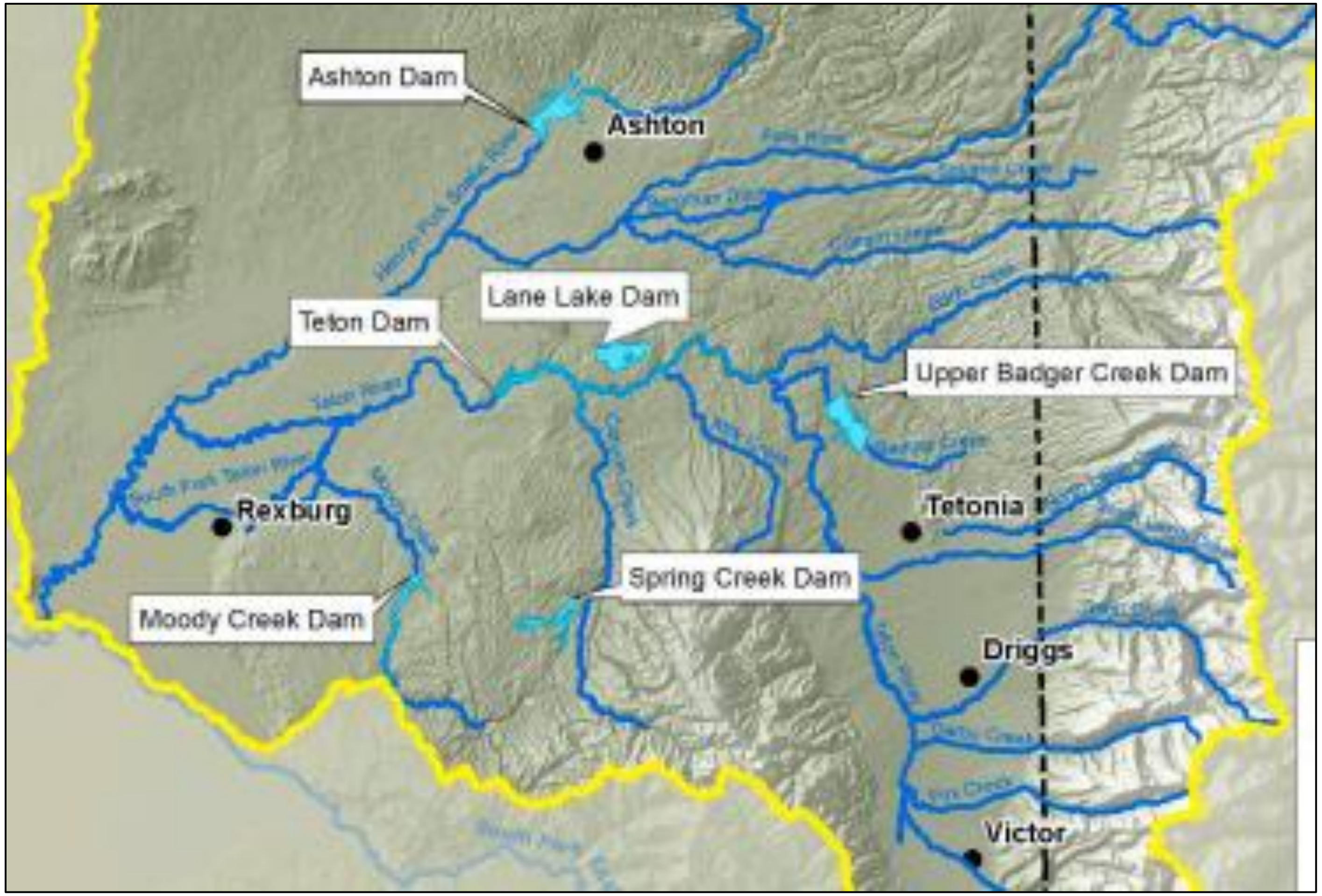

*Various water sources and conveyance options evaluated*

- Multiple alternatives evaluated:
  - Stream diversions, intake and fish screen structures, pump stations, and siphons were assessed.
  - Operating a pump system using water from the Teton River as a water source may be very costly.
  - Lined concrete spillway assumed, but alternative spillway approaches should be evaluated.

- Key Points from Evaluation and Feedback:
  - Concerns about impact of impoundment to free-flowing creek to YCT present in the inundation area; big game winter range and migration corridors with ESA listed or candidate species.
  - Provides water in Teton River drainage; however, support limited due to relatively small yield, high cost, and small contribution to larger water needs.

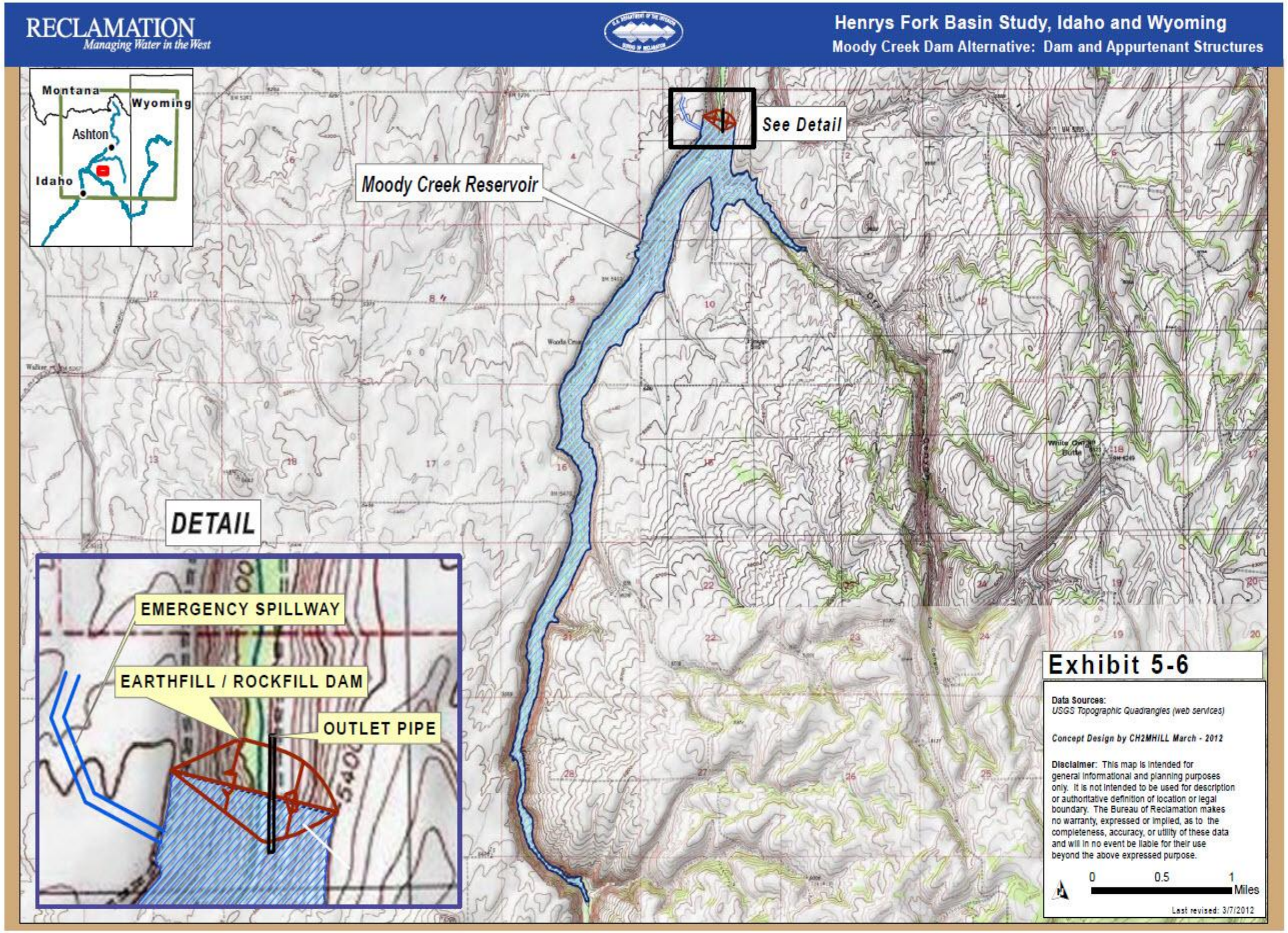
# Moody Creek Dam

- Location: Moody Creek just downstream of Dry Canyon Creek confluence
- Water Source: Moody and Canyon Creeks
- New onstream dam

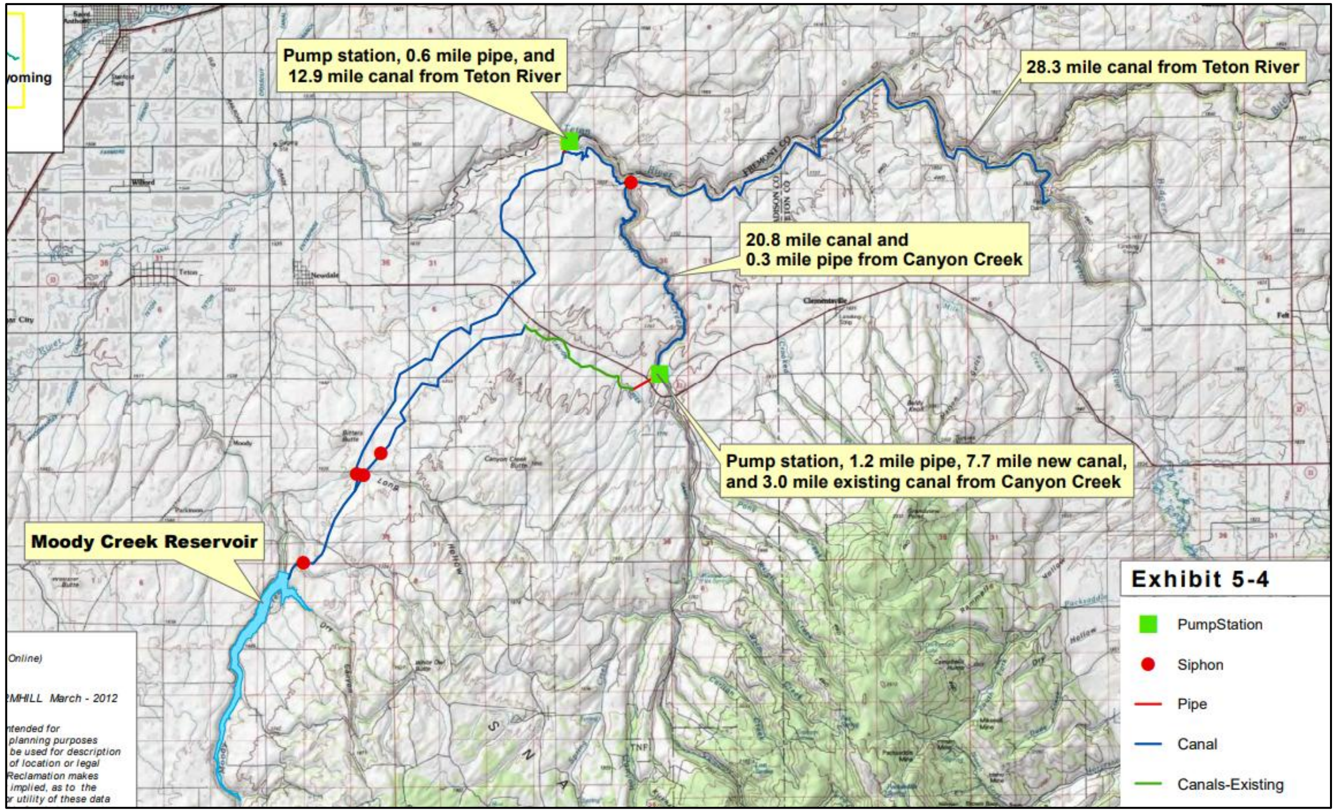


# Moody Creek Dam

- Reservoir: 37,000 ac-ft; max surface area 520 acres
- Volume: 34,400 ac-ft avg annual based on runoff availability
- Facility: 220 ft tall, 1,300 ft long dam
- Source: Moody and Canyon Creeks
- $123.9 million
- $3,600/ac-ft



# Moody Creek Dam

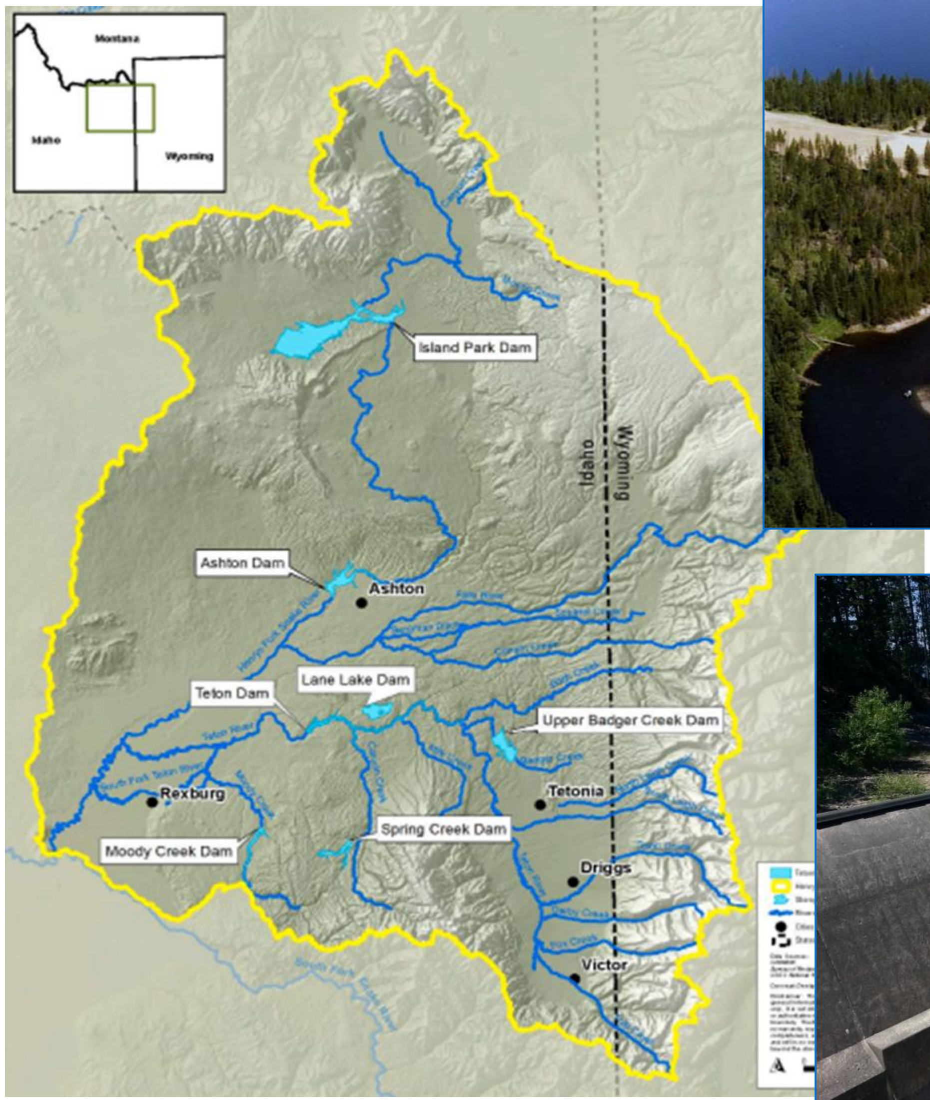



*Various water sources and conveyance options evaluated*

- <u>Multiple alternatives evaluated</u>:
  - More costly options requiring expensive conveyance systems, including pumping from Teton River, eliminated.
  - Alternative spillway approaches should be evaluated as local conditions may be unsuitable without lining.
- <u>Key Points from Evaluation and Feedback</u>:
  - Concerns about impact of impoundment to free-flowing creek to YCT present in the inundation area; big game winter range and migration corridors with ESA listed or candidate species.
  - May impact Canyon Creek's eligibility for listing under National Wild and Scenic Rivers System.
  - Concerns about its utility, economic viability, and potential impacts to environment (similar to Moody and Spring Creek alternatives).

# Island Park Storage Increase

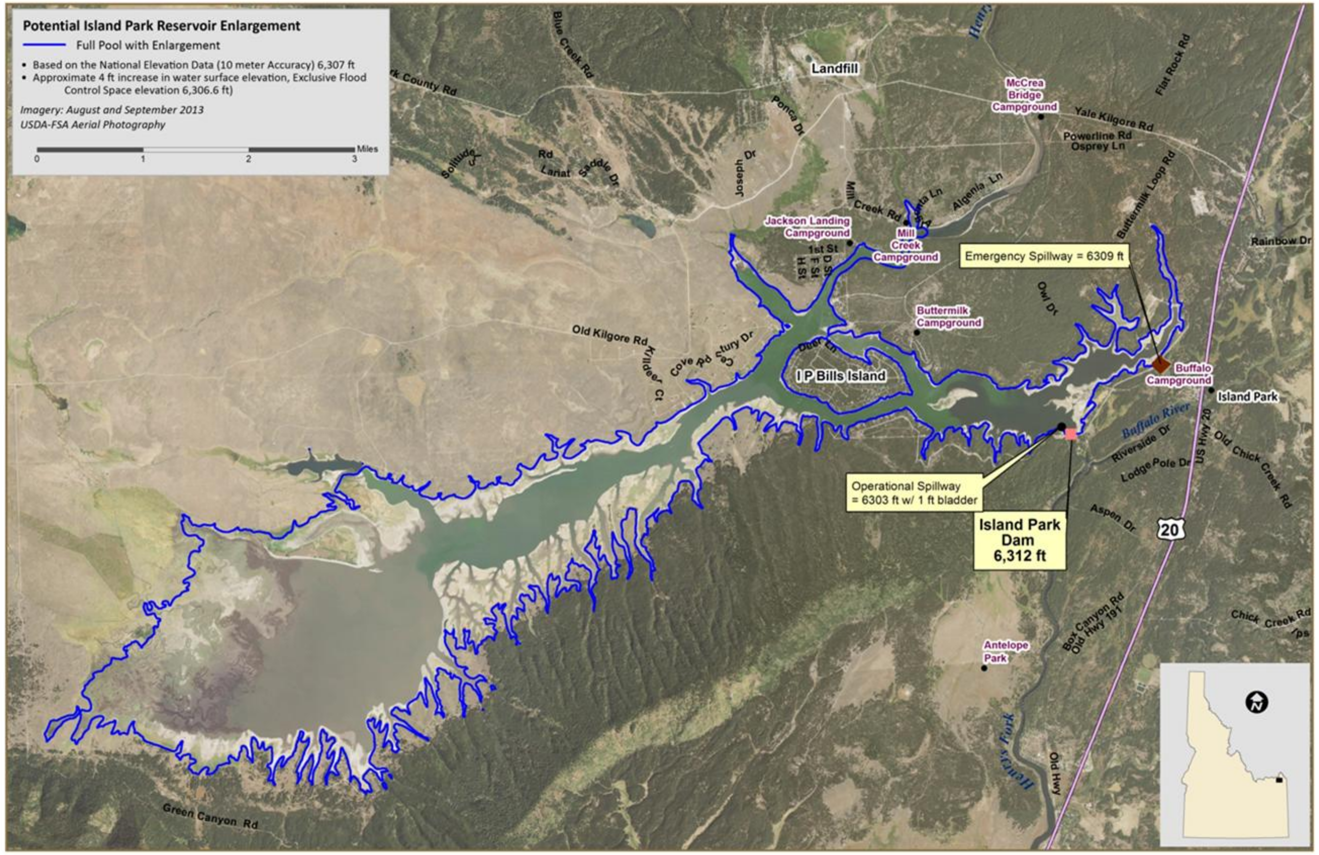
- Location: Island Park Dam (Reclamation owned, operated by FMID)
- Water Source: Henrys Fork River
- Alternative: Convert existing/exclusive flood surcharge space to storage space by raising reservoir water surface elevation up to 4 feet.




# Island Park Storage Increase

- Additional Volume: 26,700 af avg annual
- Facility: Increase operational pool WSE up to 4 ft; expand spillway capacity (increase emergency spillway width to 1,130 ft); add 5-ft bladder to operational spillway.
- $6.4 million
- $240/ac-ft

# Island Park Storage Increase

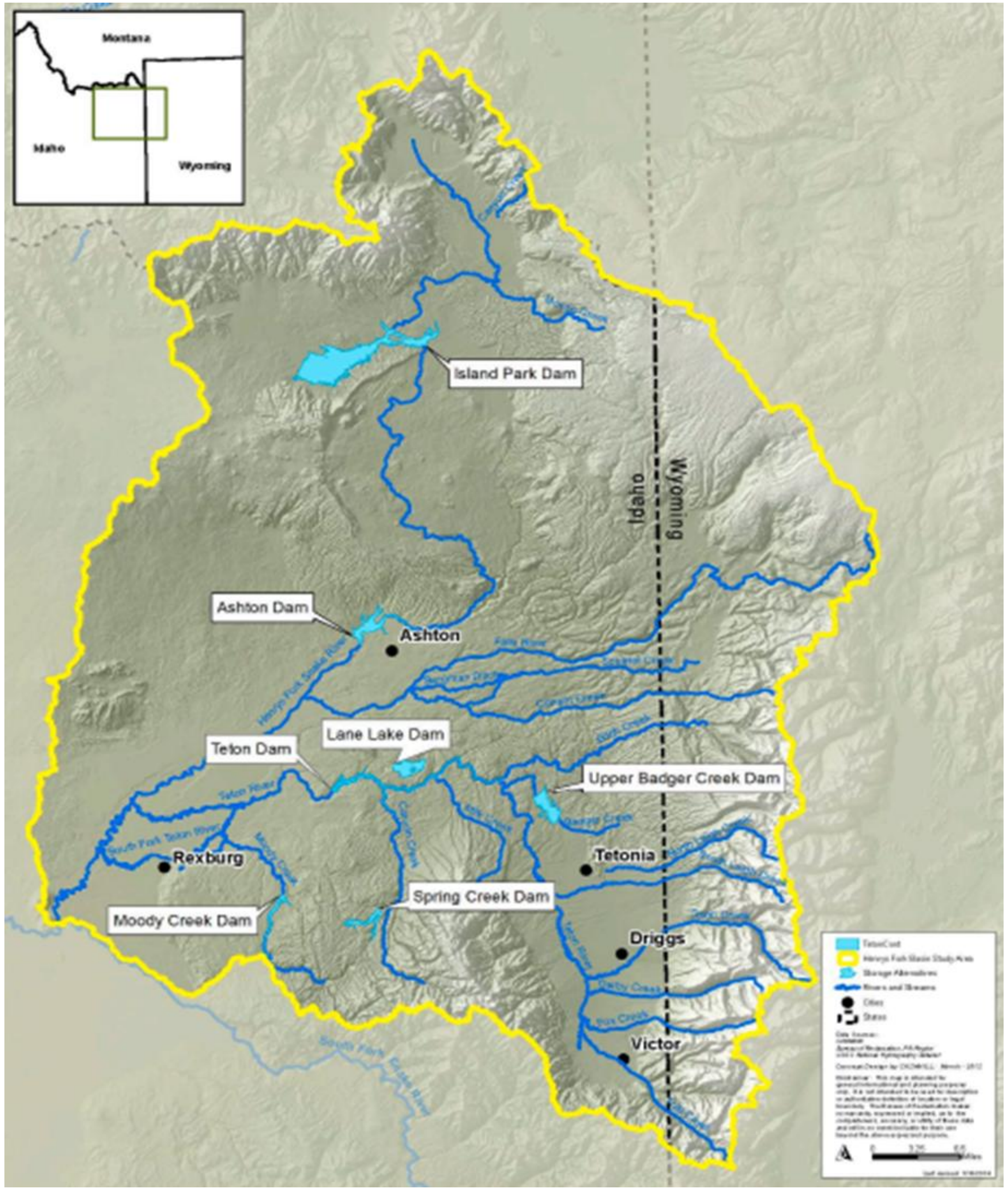



- Study Findings:
  - Least expensive surface storage alternative.
  - Additional 26,700 af available approx. 78% of time and no additional water 20% of time.
  - Increased storage may provide flexibility to manage releases during irrigation season and other critical low flow periods. This may benefit irrigators, fish populations in the river, or help augment ESPA recharge.
  - Assumed little to not impact to infrastructure around the reservoir.

- Key Points from Evaluation & Additional Analysis:
  - General support for further study of alternative due to low cost and potential to address state-wide and local water supply issues.
  - Additional review – IWRB evaluated the effects to land and infrastructure if water were stored in the space associated with existing BOR flood surcharge easements. The significant amount of infrastructure constructed within the BOR flood easement which limited viability of alternative.

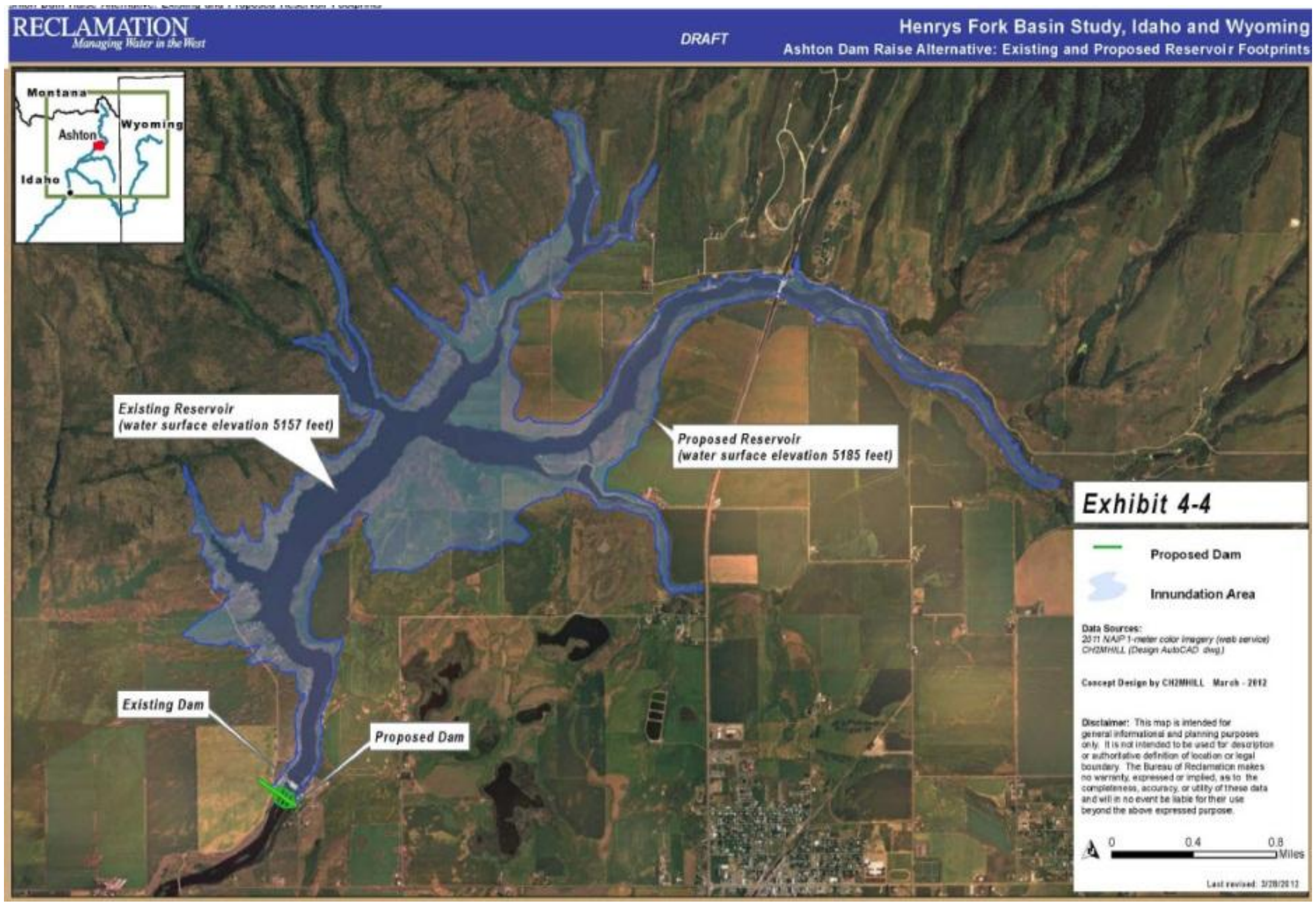
# Ashton Dam Raise

- Location: Ashton Dam (owned by PacifiCorp Energy) and operated as run-of-the-river hydro project.
- Located adjacent to Town of Ashton.
- Water Source: Henrys Fork River
- Alternative: Increase height of dam by approx. 43 ft (total height of 100 ft)



# Ashton Dam Raise

- Additional Volume: 20,400 af avg annual (increase reservoir to 30,200 af) based on runoff availability
- Facility: Raise dam 43 ft to a total height of 100 ft
- Source: Henrys Fork River
- Hydro: 80 ft drop when full (not included in cost)
- $28.2 million
- $1,382/ac-ft



# Ashton Dam Raise

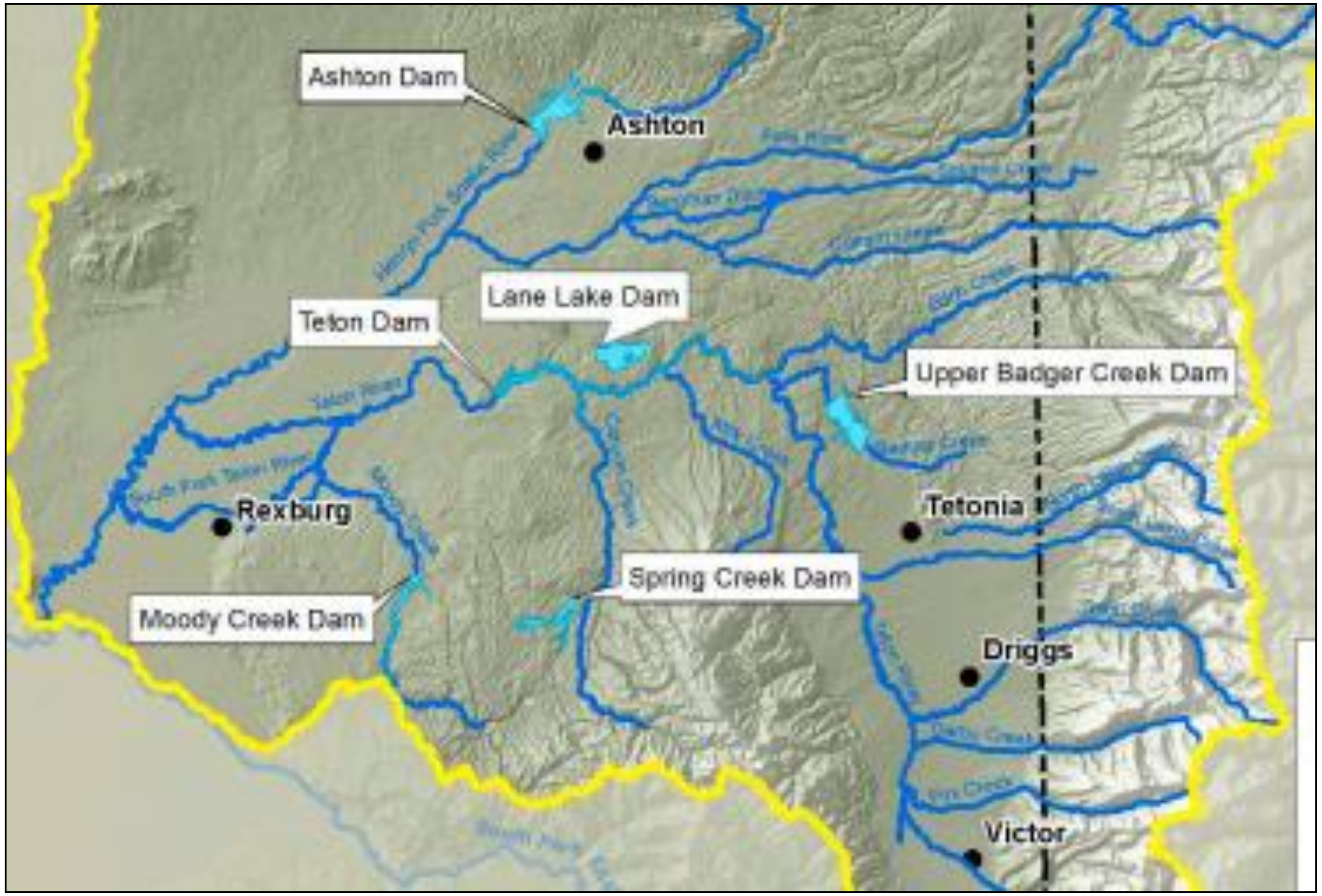
- Study Findings:
  - Reservoir releases could enhance ecological instream flows in the Henrys Fork River downstream of St. Anthony, and could be used to meet irrigation and other water use needs in the lower watershed or out-of-basin.

- Key Points from Evaluation & Additional Analysis:
  - Modification to an existing structure may translate to less significant environmental impacts and construction of a new dam. Therefore, there was general support for further study.
  - Embankment configurations were generalized and would require detailed evaluation.
  - Ashton Dam is privately owned by PacifiCorp and operated for power generation. Future studies would require involvement by PacifiCorp and likely include improvement of hydropower benefits.


Ashton Dam
Grainville
Farnum
Image Landsat / Copernicus
Image © 2025 Airbus
Google Earth

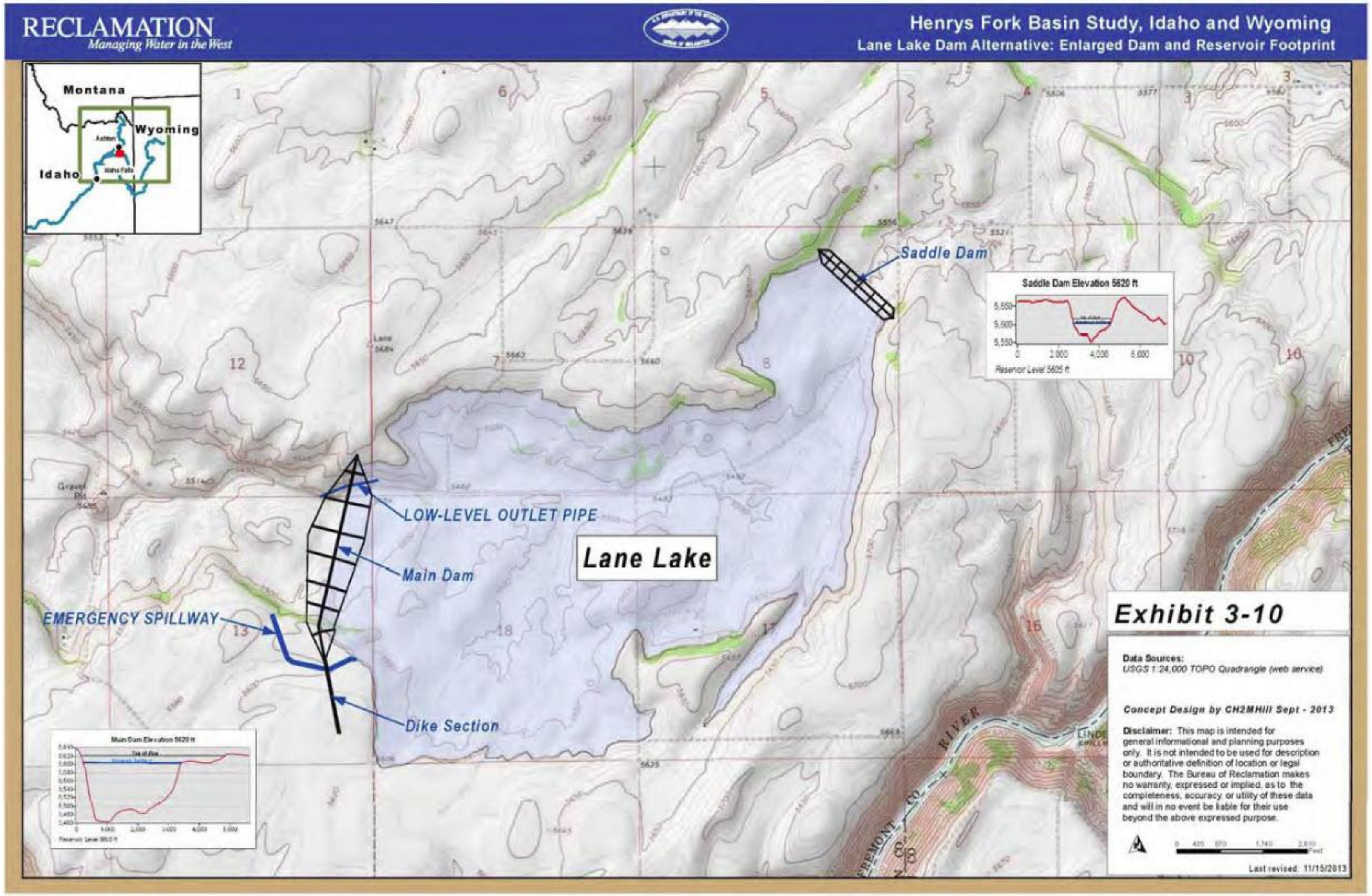
# Lane Lake Dam

- Location: Dry drainage about 1 mile north of Teton River and 5 miles downstream of Bitch Creek confluence.
- Water Source: Teton and Fall River
- New dam site



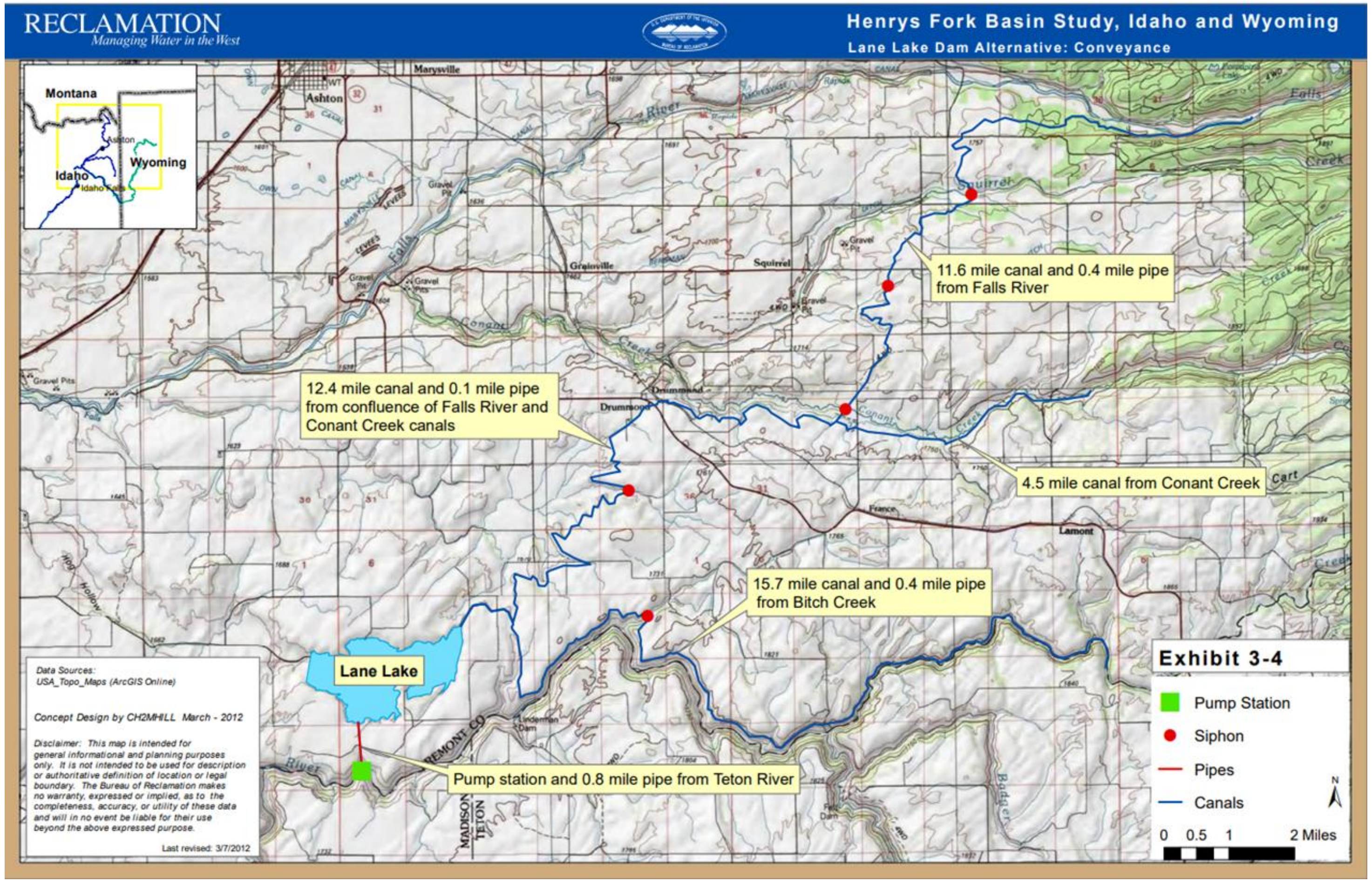
# Lane Lake Dam

- Site: off-channel 101,000 af reservoir
- Volume: 98,000 af or more based on runoff availability
- Facility: 160 ft tall main dam and smaller saddle dam
- Water Source: Teton River (pumping required) and Fall River
- Hydro: 145 ft drop when full (not included in cost)
- Located on private land
- $462 million (without hydropower)
- $4,600/ac-ft



# Lane Lake Dam – Study Findings

- One of most costly alternatives.
- Ecological flow targets were modeled to minimize impacts to Fall and Teton Rivers. Additional evaluation needed with consideration of water right priorities.
- Modeling showed approx. 90 kaf available for storage 75% of time; no water available 15% of time.
- Alternative spillway approaches should be evaluated as local conditions may be unsuitable without lining.




*Various water sources and conveyance options evaluated*

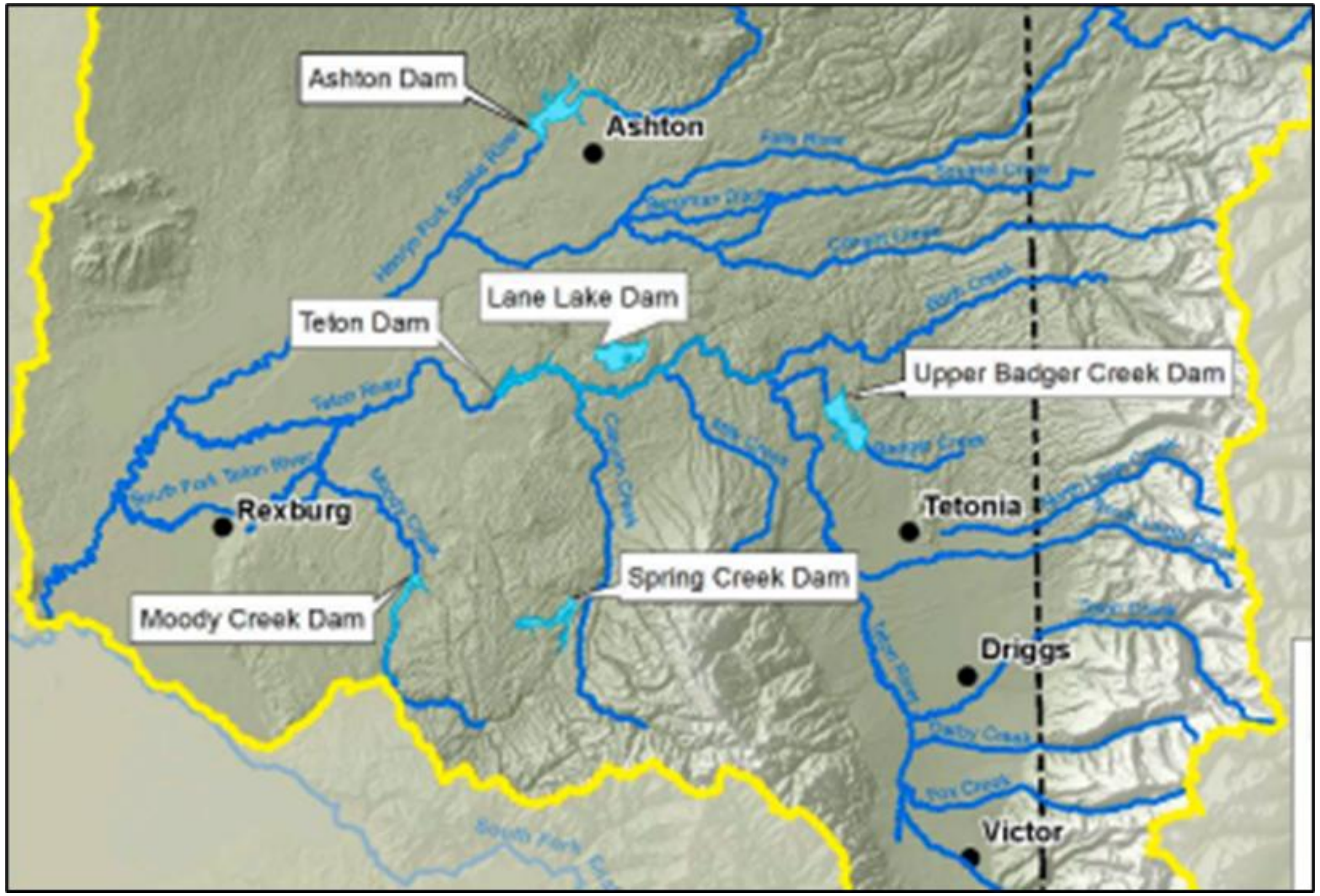
# Lane Lake Dam

- Key Points from Evaluation and additional analysis:
  - General support further study due largely to off-stream location and potential to enhance stream connectivity, but there are concerns about impacts to aquatic ecosystem at proposed diversion points.
  - Site is off-stream but is located on private irrigated farmland with residences and structures and would require negotiation.
  - Has pump-back power potential (costs not evaluated) – pump when power is abundant in early spring and generate power when supply is constrained in late summer/early fall.
  - Large storage volume improves potential to address a wide variety water supply issues.


Image © 2025 Airbus
Google Earth

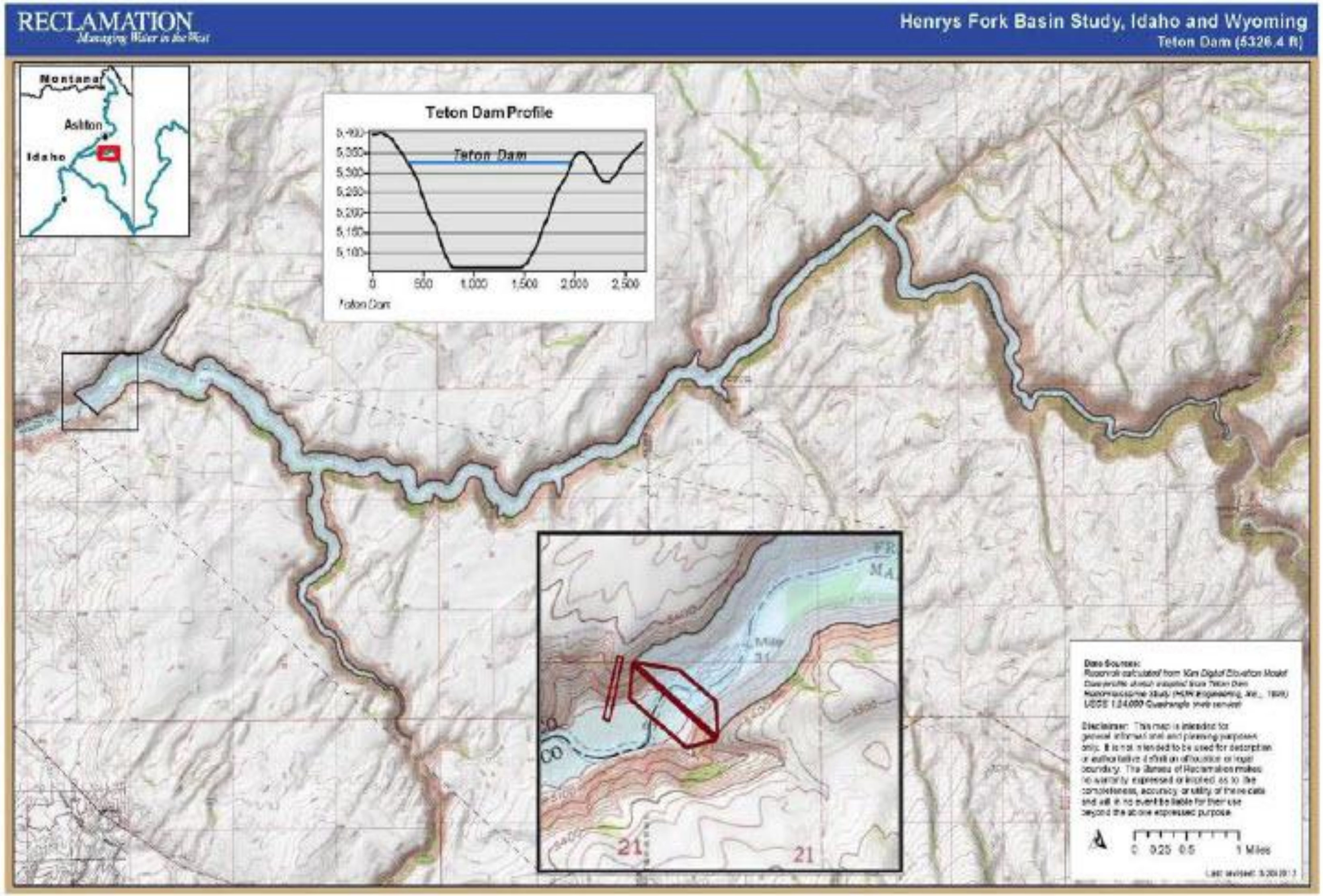
# Teton Dam

- Location: Teton Dam site approx. 16 miles upstream of City of Rexburg
- Water Source: Teton River
- Alternative: Reconstruction of a dam at original site.



# Teton Dam

- Reservoir: 265,000 af
- Volume: 202,000 af based on runoff availability
- Facility: 300 ft tall and 2,300 ft long
- Hydro: 285 ft drop when full (not included in cost estimate)
- Source: Teton River
- $492.2 million (cost without fish passage or hydropower cost)
- $1,900/ac-ft



# Teton Dam – Study Findings & Assumptions

- Has one of the highest construction costs. Cost/af offset by high potential storage.
- Alternative considers original Teton Dam to impound water in the Teton River canyon for irrigation, flood control, hydropower generation, recreation, and fish and wildlife purposes as originally authorized by Congress.
- Analysis does not consider operation with existing storage facilities, water agreements, water rights, or required instream flows for wildlife purposes that have come into play since the original dam's failure.
- This alternative considers only rebuilding a dam and reservoir, as presented in the 1991 Reclamation Reappraisal Report, and using the existing irrigation water conveyance system to the existing agricultural lands. (Other alternatives were evaluated but not carried forward).

# Teton Dam – Study Findings & Assumptions

- Ecological flow targets were modeled to minimize impacts to Teton River downstream and more accurate reflection of potential storage by incorporating mitigation scenarios. Additional evaluation needed with consideration of water right priorities.
- Modeling showed approx. 200 kaf available for storage 50% of time, 85 kaf 75%, and no water available 15% of time.
- Additional analysis of potential water available for storage and changes to flow in the Teton River should incorporate water right priority and system operations.
- Teton Dam would have a major impact on fish populations by blocking migration, inundating habitat, and creating slack water that would negatively impact fisheries dependent on river environments.
- Additional impacts: fish and wildlife; impacts to the lower reaches of Bitch, Badger, and Canyon Creeks; recreation (whitewater rafting, hunting, fishing, etc.).  Slake water recreational opportunities would increase.

# Teton Dam – Key Points from Evaluation & Feedback

- Teton Dam represents an opportunity to store a large amount of water. Potential environmental impacts would be challenging to resolve.
- Public acceptance of any new dam at the original dam site could be problematic given the history of its failure.
- Teton Dam site is owned by Reclamation. Congressional authorization would be required to allow the site to be used for reconstruction or to be transferred to another party, such as the State. The original repayment contractors may still have repayment obligation to the Federal government for the original Teton Dam.
- While the environmental and social issues with this alternative are significant, there is recognition that development of a reservoir could be valuable for water management purposes.

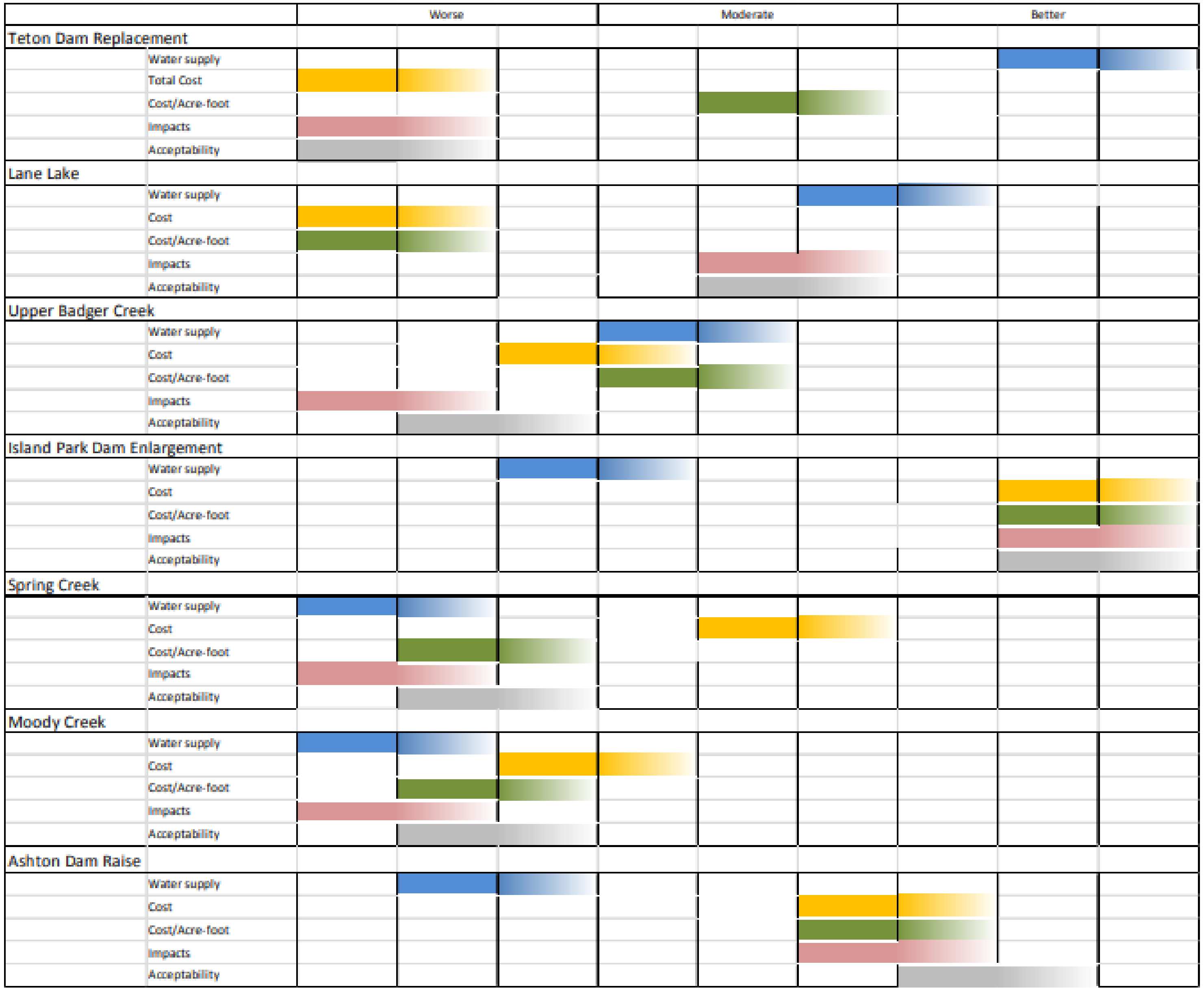
# Storage Alternatives Comparison

Key parameters to compare alternatives:

- Water Supply (effectiveness)
- Total Cost
- Cost/Acre-foot
- Impacts (environmental, other)
- Acceptability (local and broad stakeholder support)

6.0 Trade-off Analysis and Conclusions

**Table 14. Comparison of the Henrys Fork Basin Study surface storage alternatives based on the four key criteria.**



# Storage Alternatives Comparison

**Table 3. Quantitative comparison of alternatives.***

| Alternative | Total Cost | Cost per acre-foot | Effect to Water Budget | Effects to Environment |
|---|---|---|---|---|
| Lane Lake Dam | $462,000,000 | $4,600 | 101,000 acre-feet new stored water | Moderate |
| Spring Creek Dam | $41,760,000 | $3,900 | 10,800 acre-feet new stored water | Significant |
| Moody Creek Dam | $123,920,000 | $3,600 | 10,800 acre-feet new stored water | Significant |
| Upper Badger Creek Dam | $128,940,000 | $2,700 | 47,000 acre-feet new stored water | Significant |
| Teton Dam | $492,210,000 | $1,900 | 202,000 acre-feet new stored water | Significant |
| Island Park Dam Storage Increase | $6,400,000 | $240 | 26,700 acre-feet new stored water | Low |
| Ashton Dam Raise | $28,210,000 | $1,382 | 20,400 acre-feet new stored water | Low |

# Storage Alternatives – Study Conclusions

- Implementation of a storage project:
  - "The surface storage alternatives were evaluated on a conceptual level in the Basin Study and determined to be viable from an engineering perspective. New surface storage comes with the potential for significant environmental impacts to river environments and surrounding land uses. Considerably more study and design are required before any alternative could be seriously considered for implementation."
  - Additional engineering, geologic, and hydrologic analysis required for all sites.
  - Obtain sufficient funding – may come from interested stakeholders and Federal, state, and/or local partnership.
  - May need to address legal issues, permitting requirements, and potential land acquisition (some alternatives involve privately owned land).
  - Federal involvement would likely require compliance with: National Environmental Policy Act (NEPA), Endangered Species Act (ESA), National Historic Preservation Act, Corps of Engineers 404 permit under the Clean Water Act, FERC (hydropower), and other Federal statutes.

# Non-storage Alternatives

| | | | | |
|---|---|---|---|---|
| Groundwater Recharge | $10,000,000- to 13,620,000 | $2,700- $4000 | 7,500 – 10,000 acre-feet recharged or 1.6-3.2 cfs increase in fall streamflows | Low |
| Water Market | Varies with the program | | Better management of existing supply | Low |
| Canal Automation | $1,588,000 | $491- 2,843 | Better management of existing supply, improved streamflows | Low |
| Piping in North Fremont Region | $97,000,000 | $361 | Eliminates canal seepage. Recent projects demonstrate 10,000 acre-feet saved annually | Low |
| Demand Reduction | Varies with the program | $1,860- $3,600 | 2 to 5 acre-feet are saved per acre of demand reduction. | Moderate, potential for secondary economic impacts |

# Managed Recharge Alternatives

- Evaluated as a potential source of water supply for the basin and stabilization of ESPA.
- Concluded that managed recharge may improve late season instream flow conditions with return flows and have positive effects on the ESPA.
- Evaluated in conjunction with State recharge efforts (largely IWRB sponsored at time of study).
- Multiple locations were reviewed – Egin Lakes recharge site was carried forward *(Note: this project has since been implemented by the IWRB & FMID).*
- Recharge generally received wide support from stakeholders for its local benefits through cooler/late season flows as well as contributions to ESPA.
- Private and State-led Managed recharge has increased since the Basin Study and continues to be a primary water management strategy.

# Idaho Water Resource Board Action & Current Priorities

- <u>Surface Storage</u>
  - Minidoka Dam Raise Appraisal
  - Ririe Rule Curve Analysis – Seeking additional storage through operational changes
- <u>Managed Recharge</u>: Full scale recharge program in the ESPA
- <u>Grants/Loans</u>
  - Flood Management Grant ($6.1M awarded since 2018)
  - Aging Water Infrastructure Grant ($56M awarded since 2023)
  - Groundwater to Surface Water Conversion Project Grant ($13M awarded since 2024, ESPA New)
  - ESPA Telemetry & Monitoring Grant (New)
  - SWC Measuring & Monitoring Support Grant (New)
  - Surface Water Operational Efficiencies Program (New)
- <u>Cloud Seeding Program</u>
- <u>Regional Sustainability Projects</u>

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# Idaho’s Actions & Current Priorities

- Grants
- Other Storage
- Eastern Snake Plain Aquifer & Spring Stabilization Efforts
  - Managed Aquifer Recharge
  - GW – SW Replacement Projects
  - Demand Reduction (of ground water use)
  - Cloud Seeding/Weather Modification (increase streamflow)

- Investigating new surface water storage projects
  - Minidoka, Ririe, AIG (support of infrastructure improvements, including increased storage)

- 2008 Legislative Direction:
  - HJM8 and SB 1511 ($400,000 to investigate storage in the Henrys Fork/Teton)
  - HB 428 and 644 (Statewide CAMP program and fund)

# Prioritization of Alternatives

**Non-Surface Water Storage Options**

Near-term Completion (1-7 yrs)

* Support projects advanced/supported by other stakeholders (e.g. canal automation)

Continue existing programs

* Managed aquifer recharge
* Water Markets
* Piping of Irrigation Canals in North Fremont Area
* Demand Reduction
* Municipal & Industrial Water Conservation

**Surface Water Storage Options**

Near-term Completion (1-7 yrs)

* Island Park Enlargement

Mid-term Completion (8-25 yrs)

* Ashton Reservoir Enlargement

Long-term Completion (beyond 25 yrs)

* Teton River alternative