



Bear River Development Feasibility Study

Multi-faceted Challenges Need Multi-Faceted Solutions

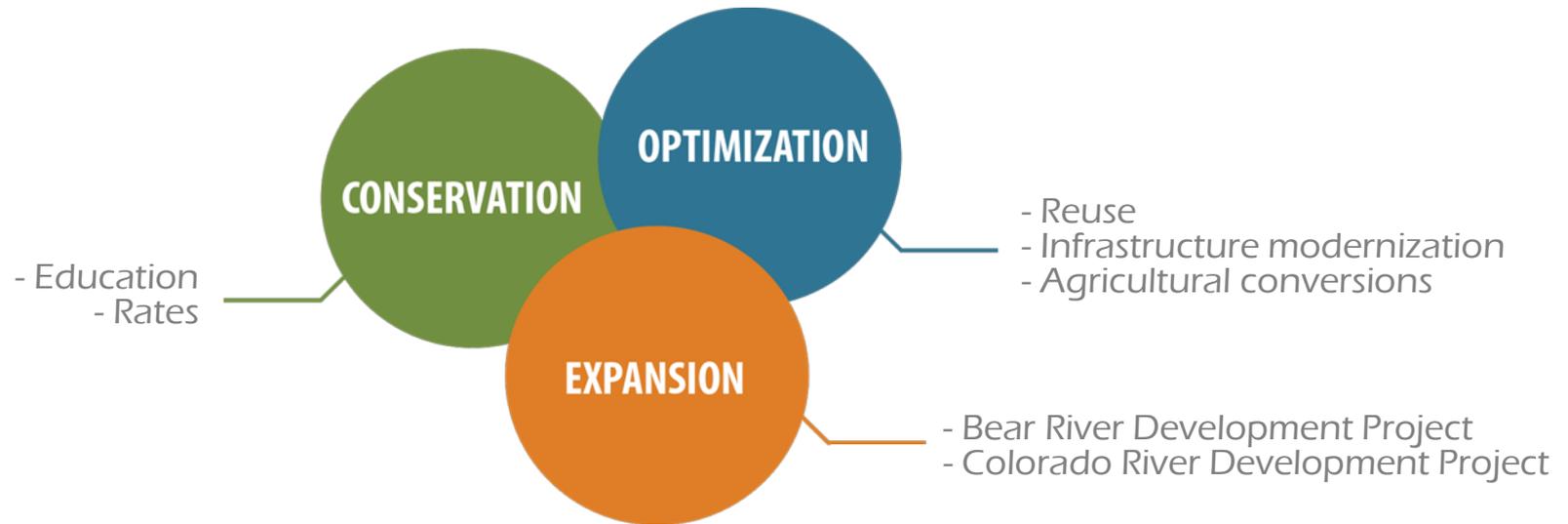


Double the
Population

3 Million → 6 Million

The Need for Water

- Utah's population is projected to double by 2060
- Additional water supply needed
- This will require **three strategies** to be successful:

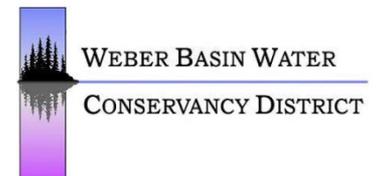


Bear River Development Feasibility Study

- Legislature tasked that Utah Division of Water Resources conduct Feasibility Study
- Feasibility Study: An assessment of a proposed plan or method
 - We are assessing the proposed development of Utah's Bear River allocation.
- Not NEPA; Not an EIS
- For example: We are evaluating which potential reservoir sites are feasible.

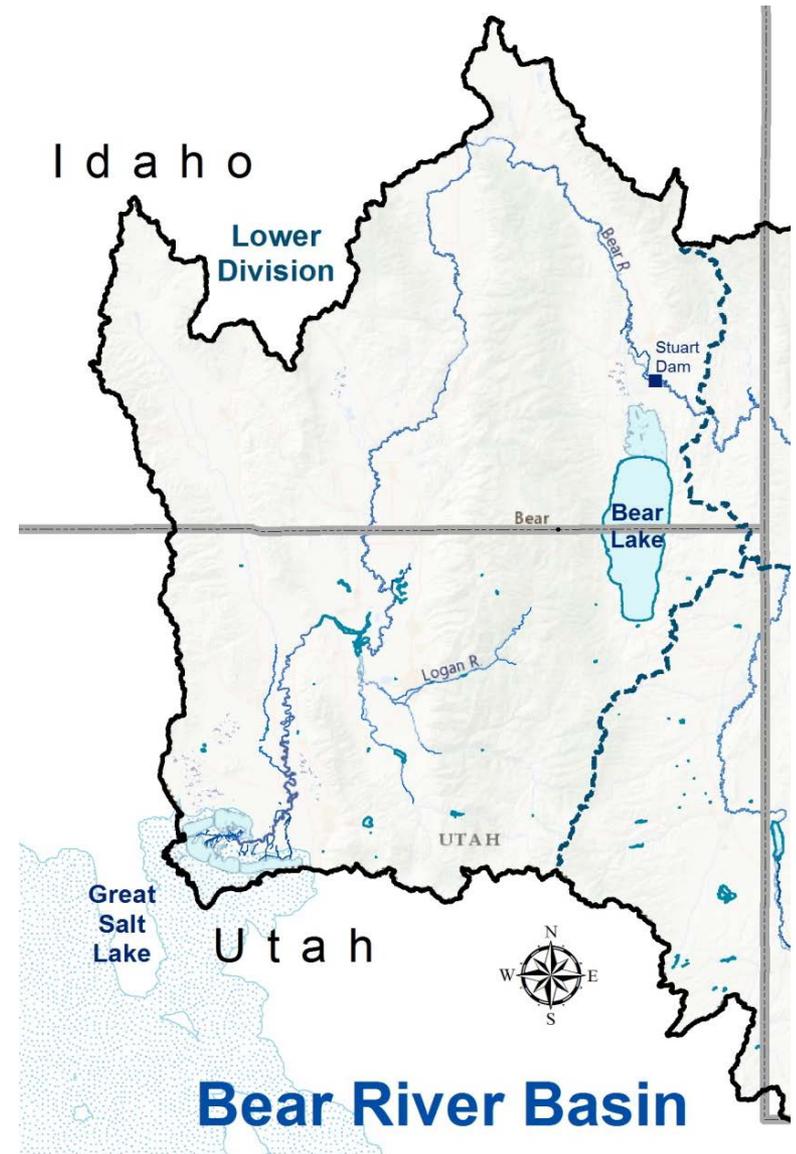
Bear River Feasibility Study Participants

- Lead Agency: State of Utah Division of Water Resources
- Participating Agencies
 - Bear River Water Conservancy District
 - Cache County
 - Jordan Valley Water Conservancy District
 - Weber Basin Water Conservancy District
- Study Team
 - Bowen Collins, Gerhart Cole, HDR



Bear River Compact

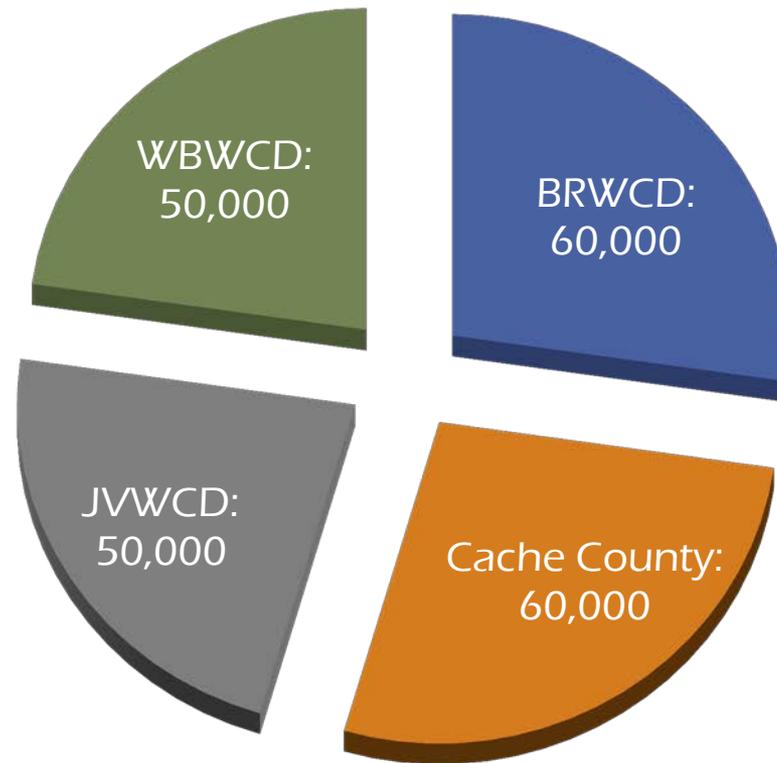
- Agreement between Utah, Idaho and Wyoming
- Regulates how the water is distributed
- 275,000 acre-feet to the State of Utah in Lower Division (downstream of Stewart Dam)
- Additional allocations



“The Division shall develop the surface waters of the Bear River and its tributaries through the planning and construction of reservoirs and associated facilities as authorized and funded by the Legislature; own and operate the facilities constructed; and market the developed waters”

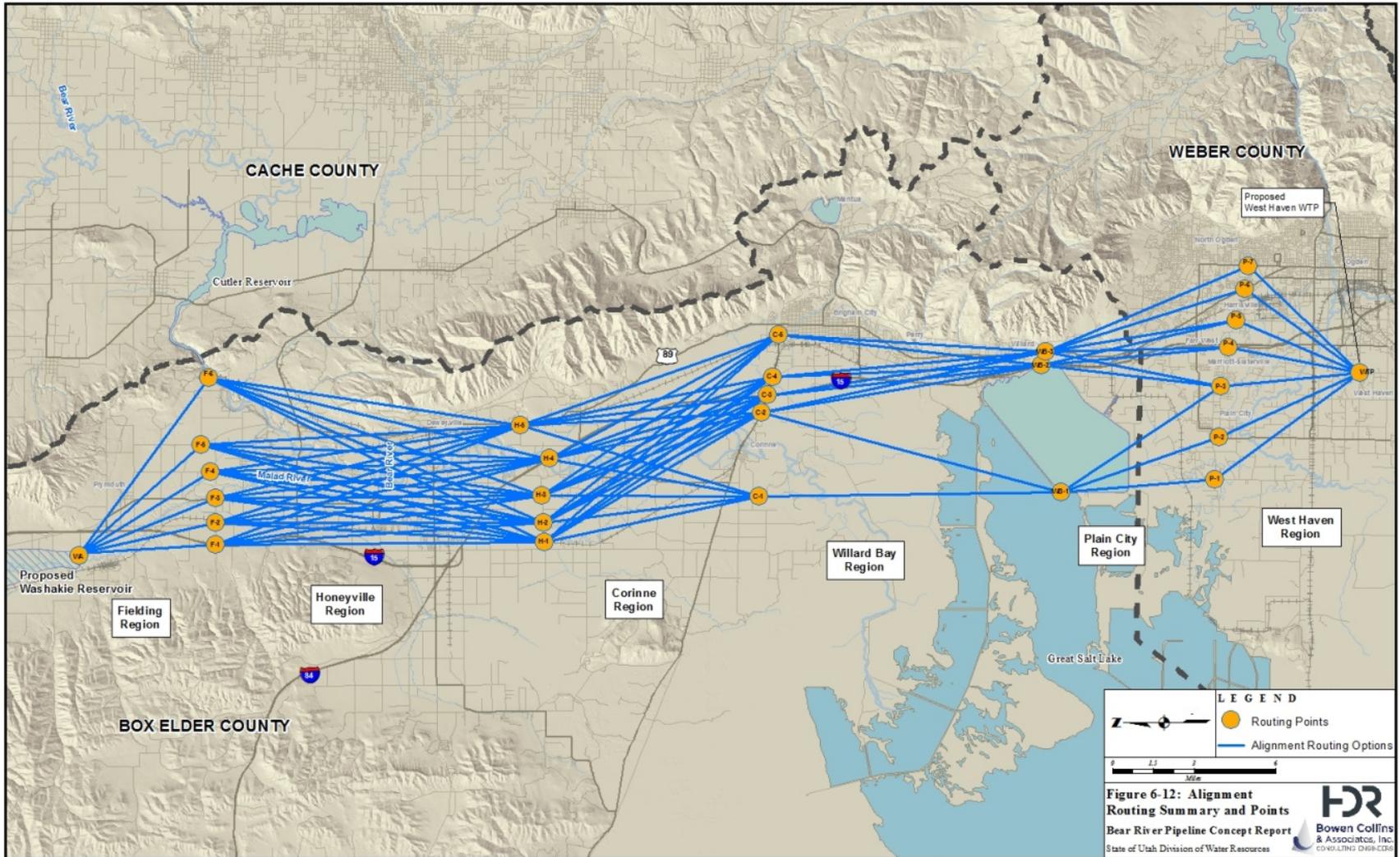
Bear River Development Act

Act - Allocation State of Utah Water Rights (acre-feet)



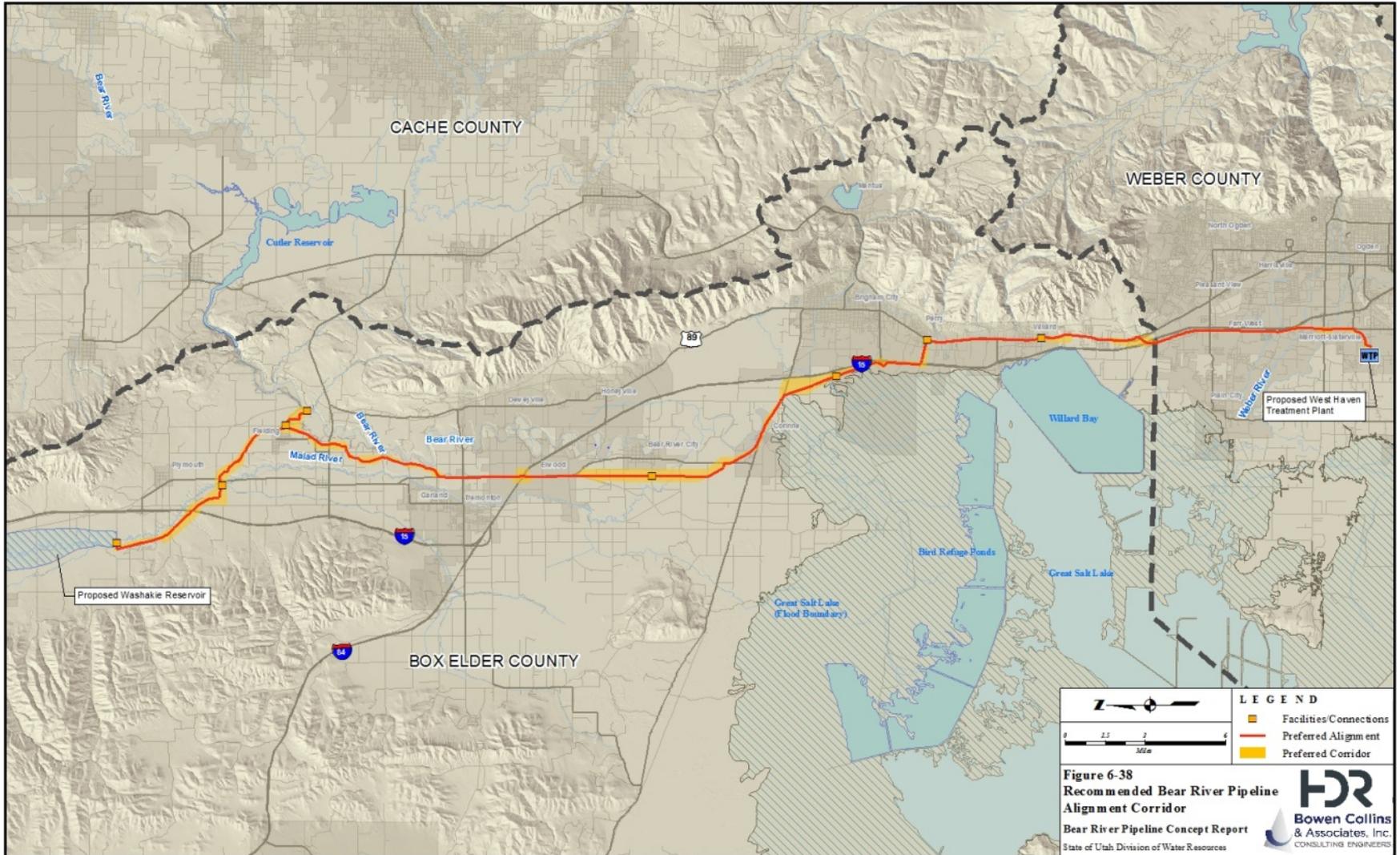
Total project water rights: 220,000 acre-feet

Pipeline Routing Analysis



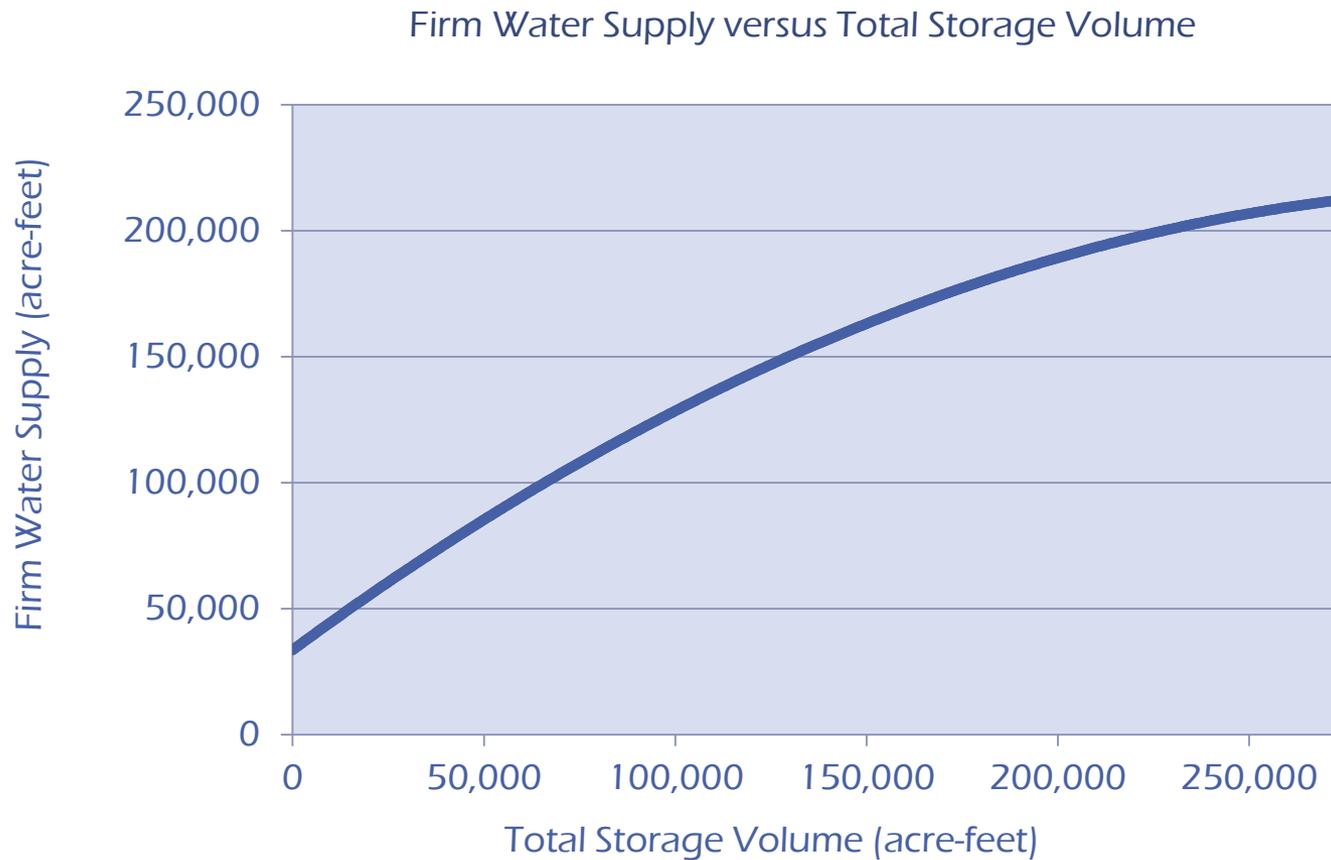
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Potential Pipeline Routing Corridor



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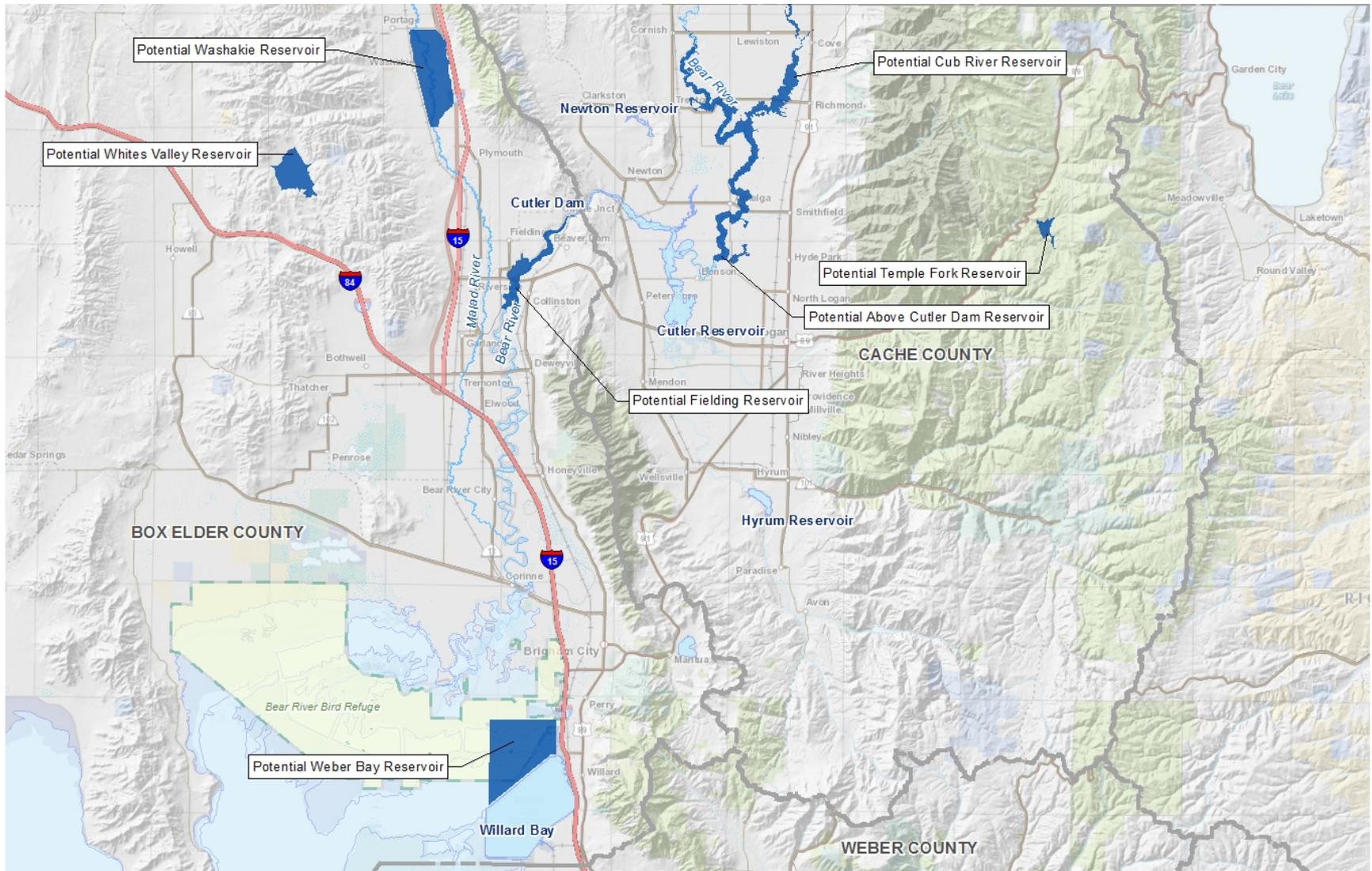
Water Supply Development

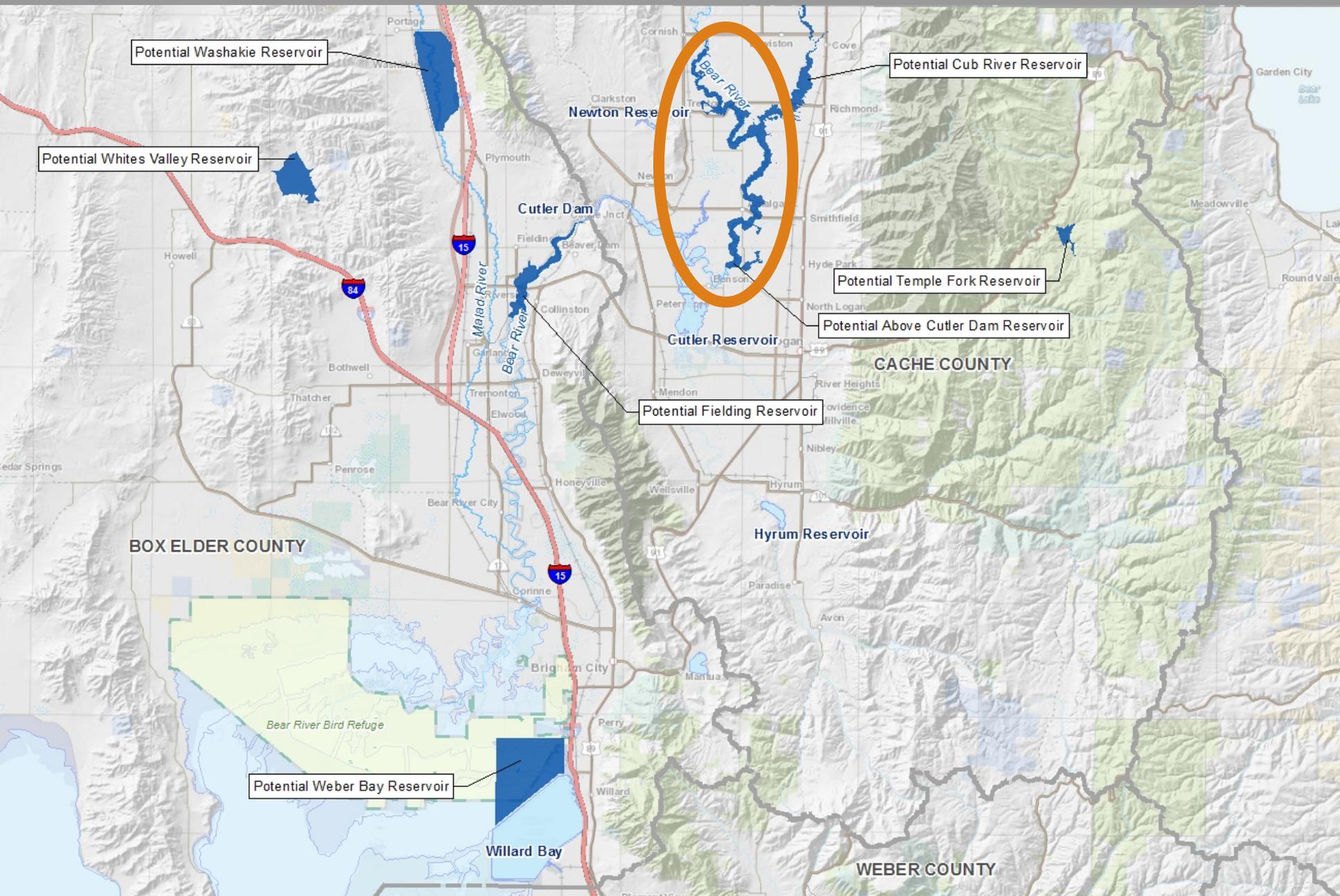


Current Study Activities

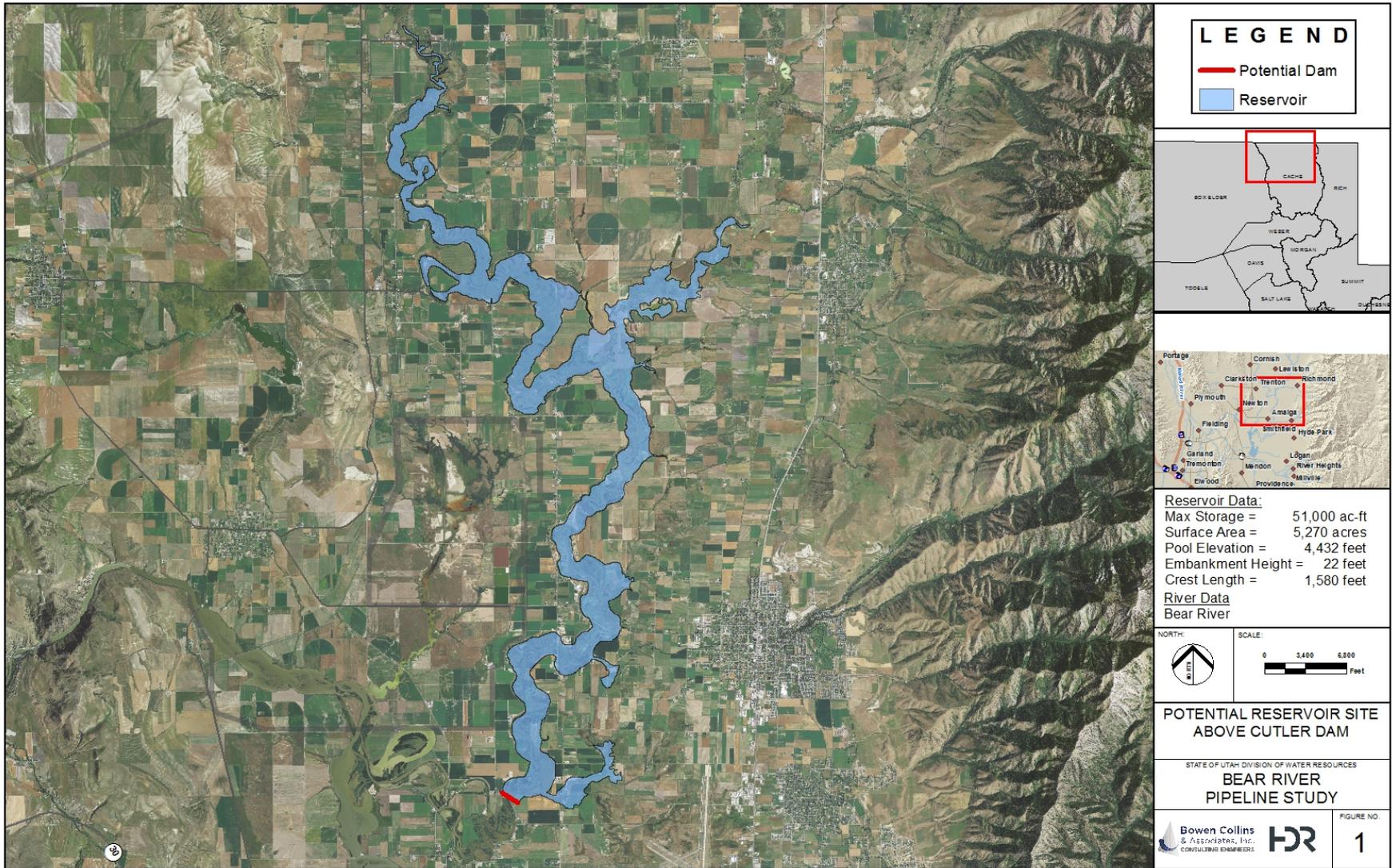
- Perform site investigations at six potential reservoir locations
- Further refine overall project facilities
- Prepare updated cost estimates
- Agency coordination
- Prepare for pipeline right-of-way acquisition

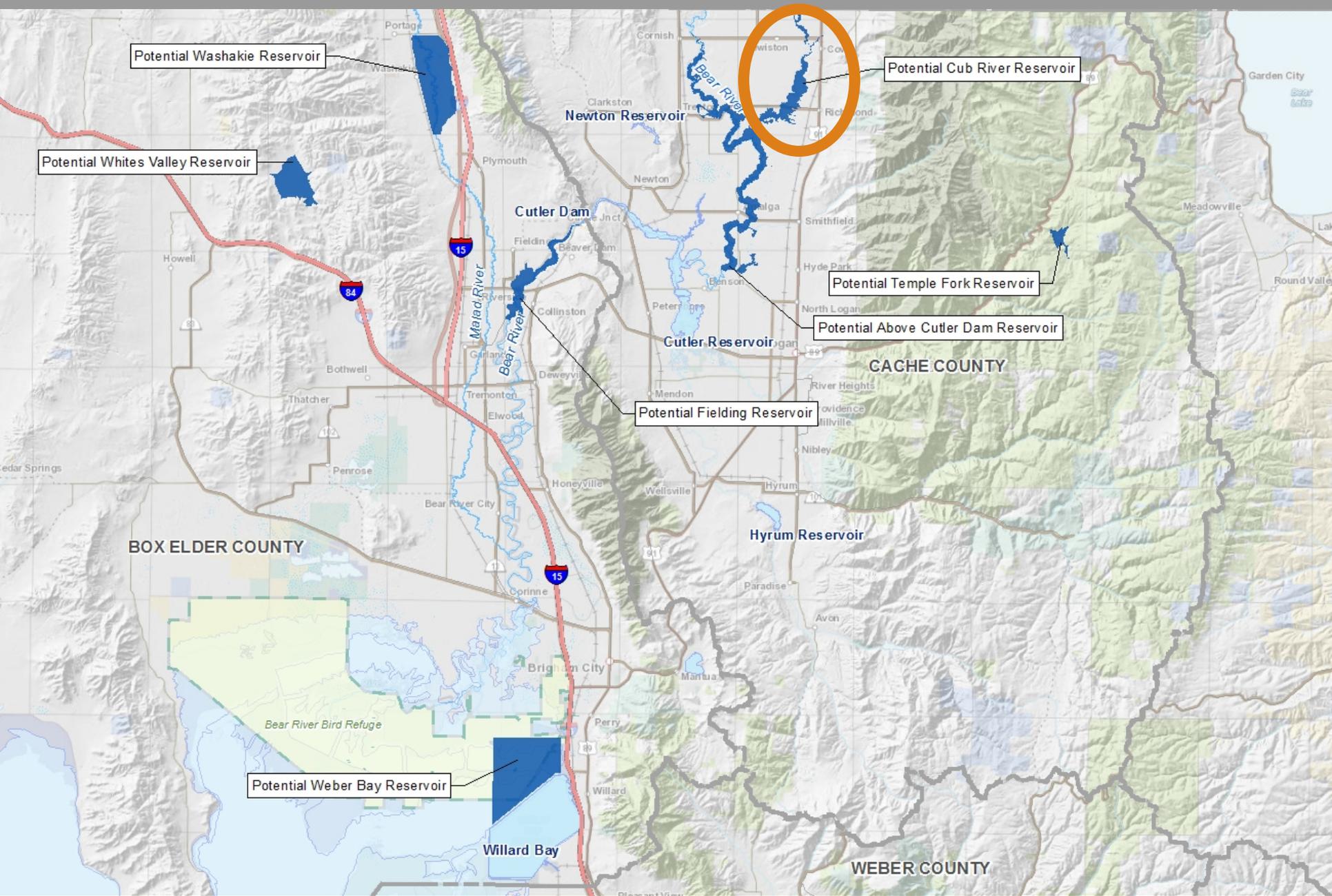
Reservoir sites being studied further



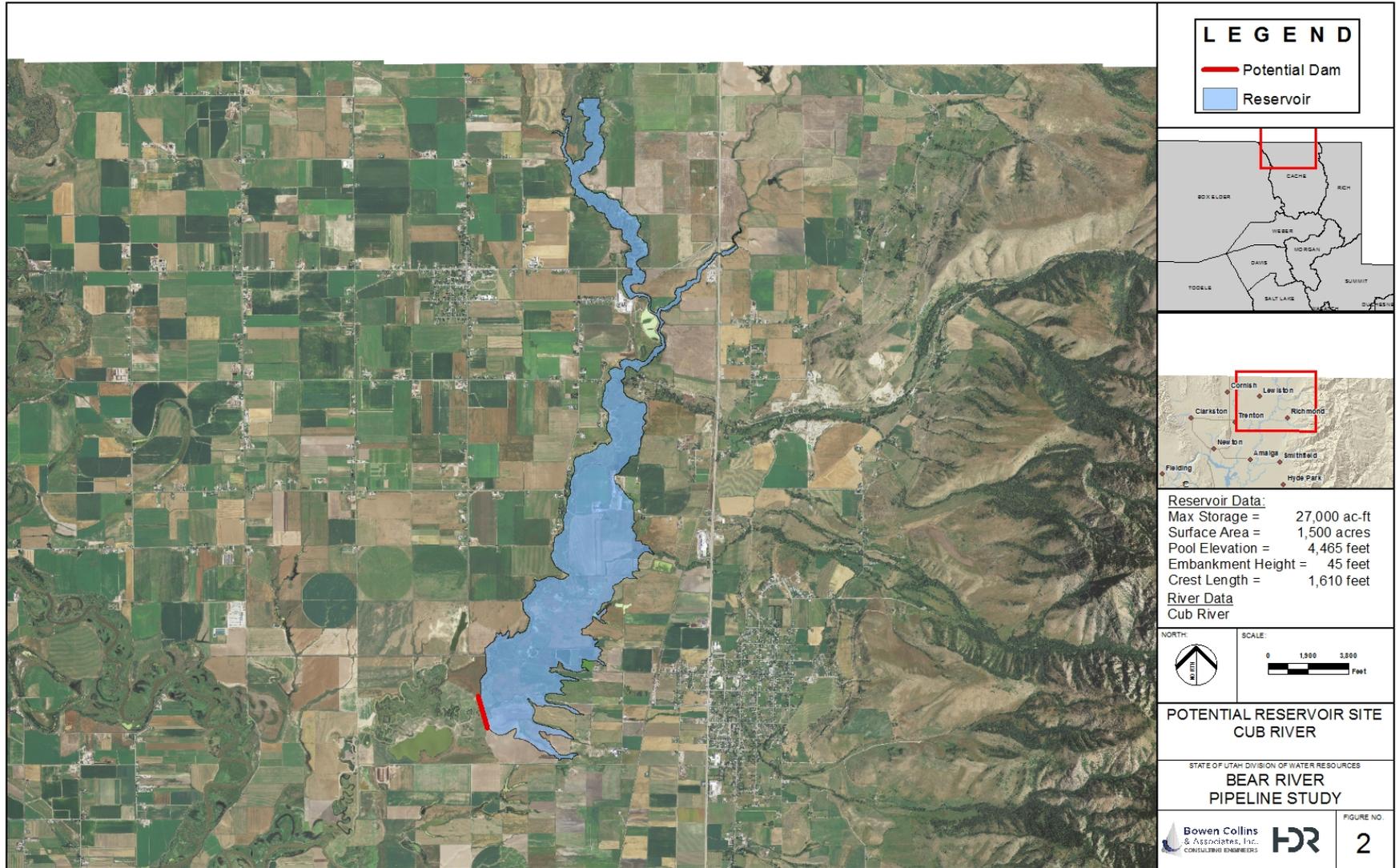


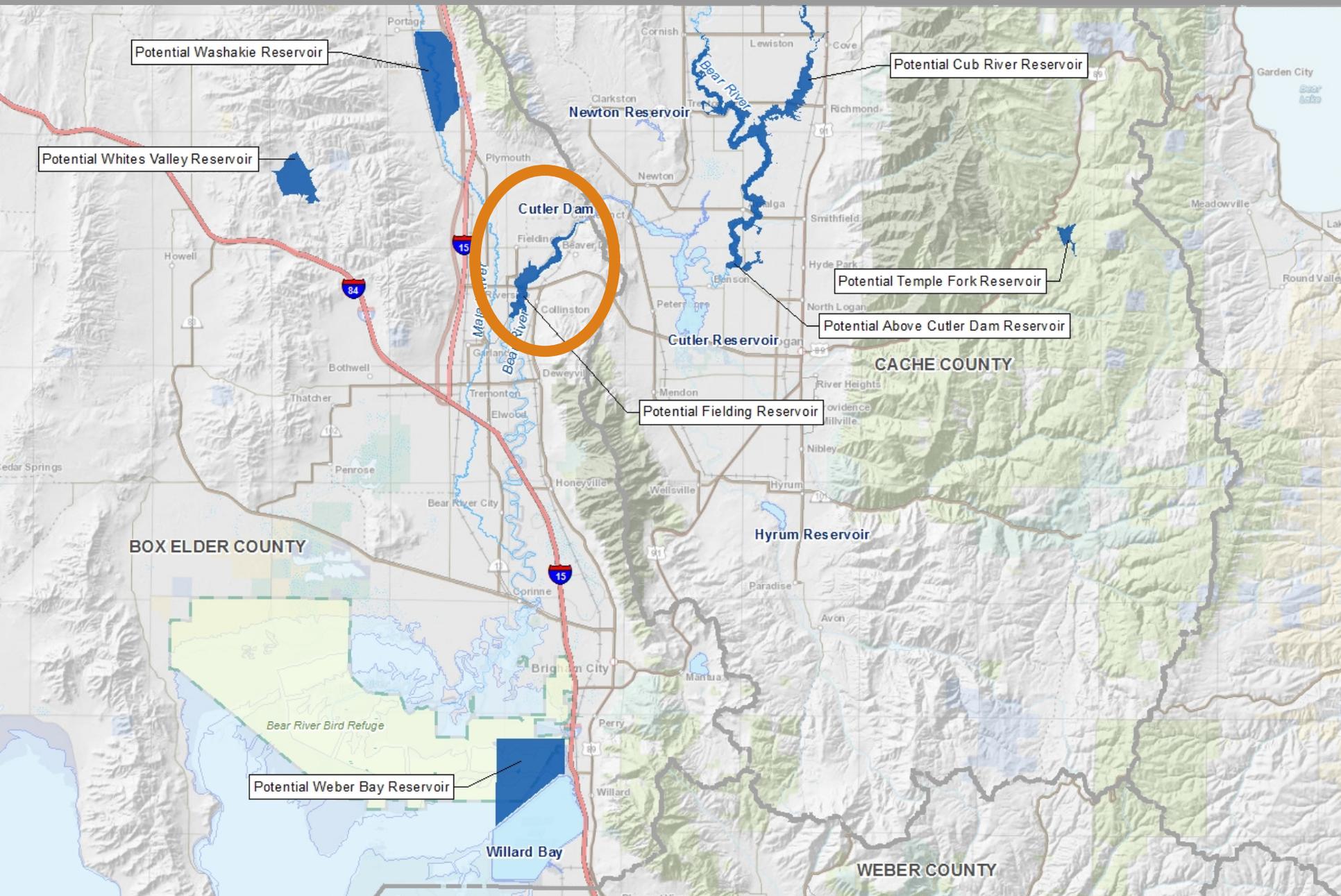
Above Cutler Dam Reservoir



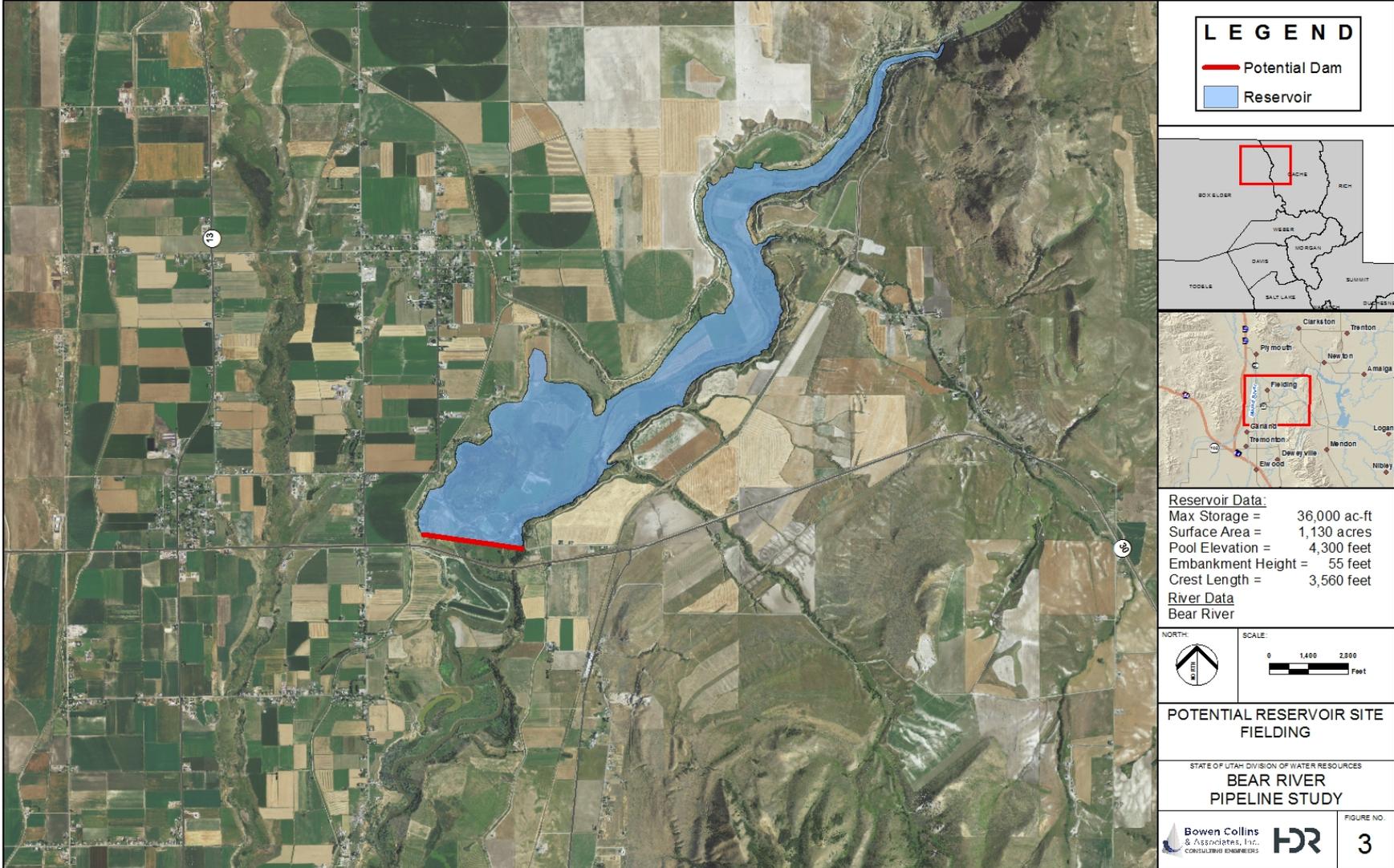


Cub River Reservoir

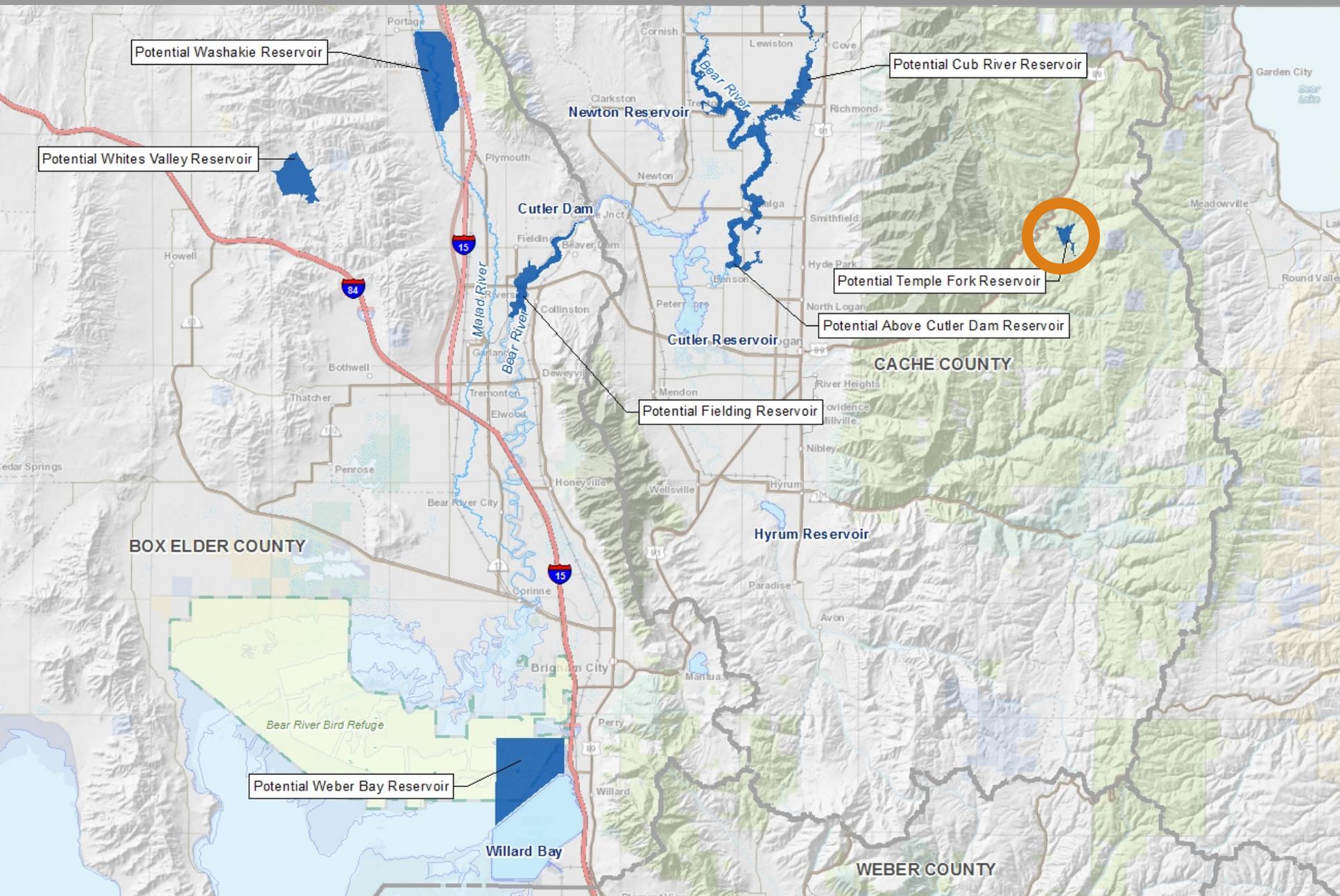




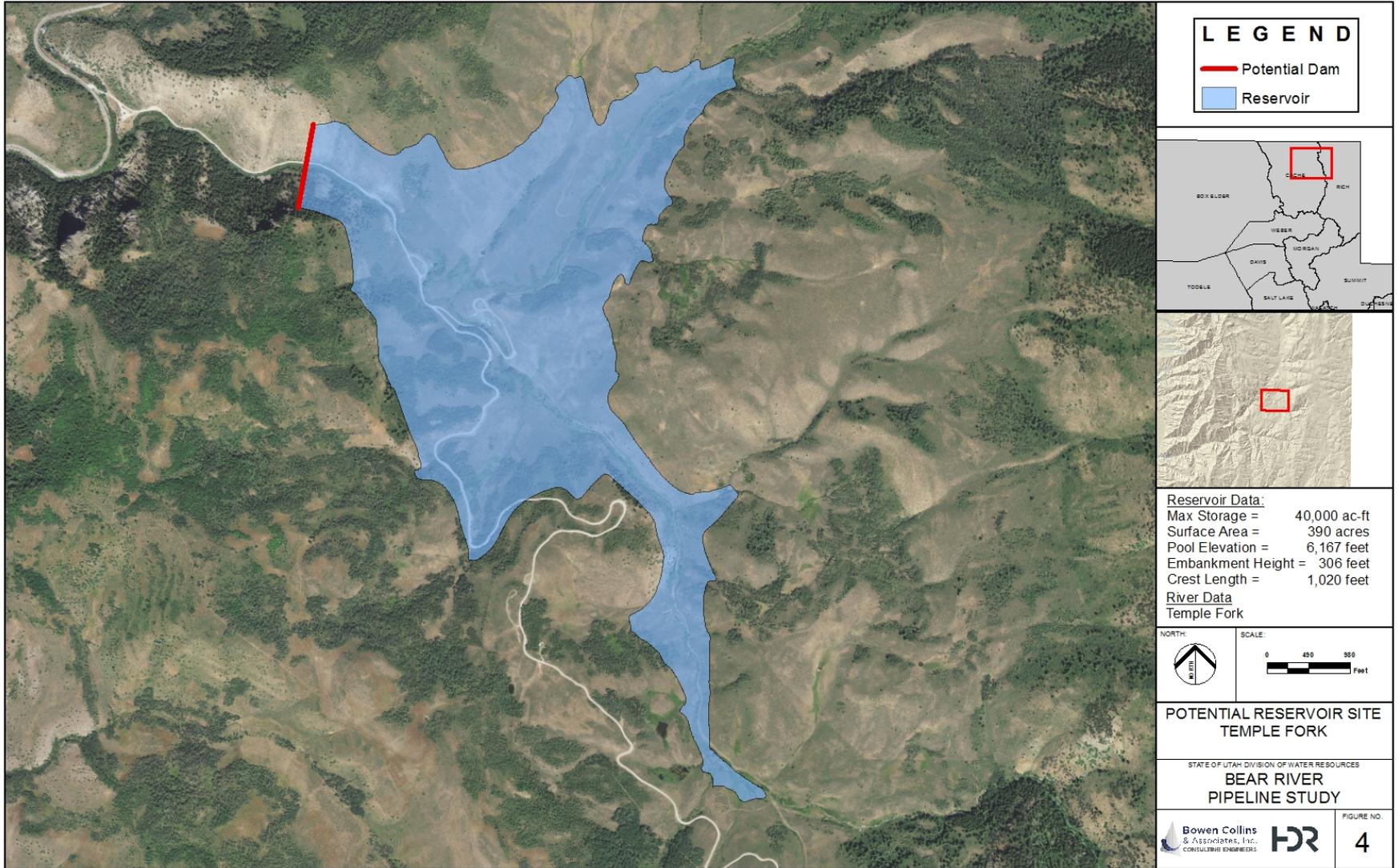
Fielding Reservoir



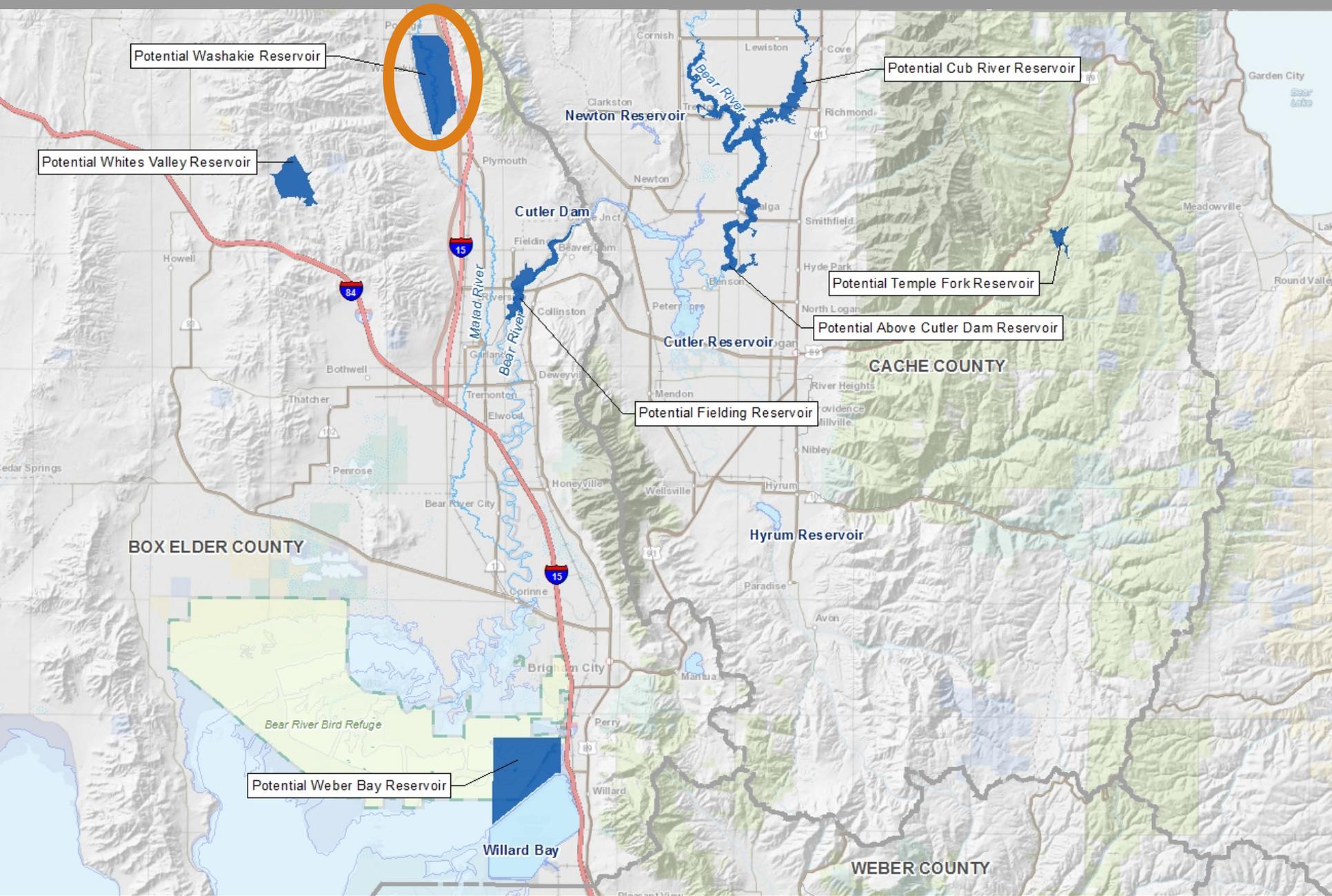
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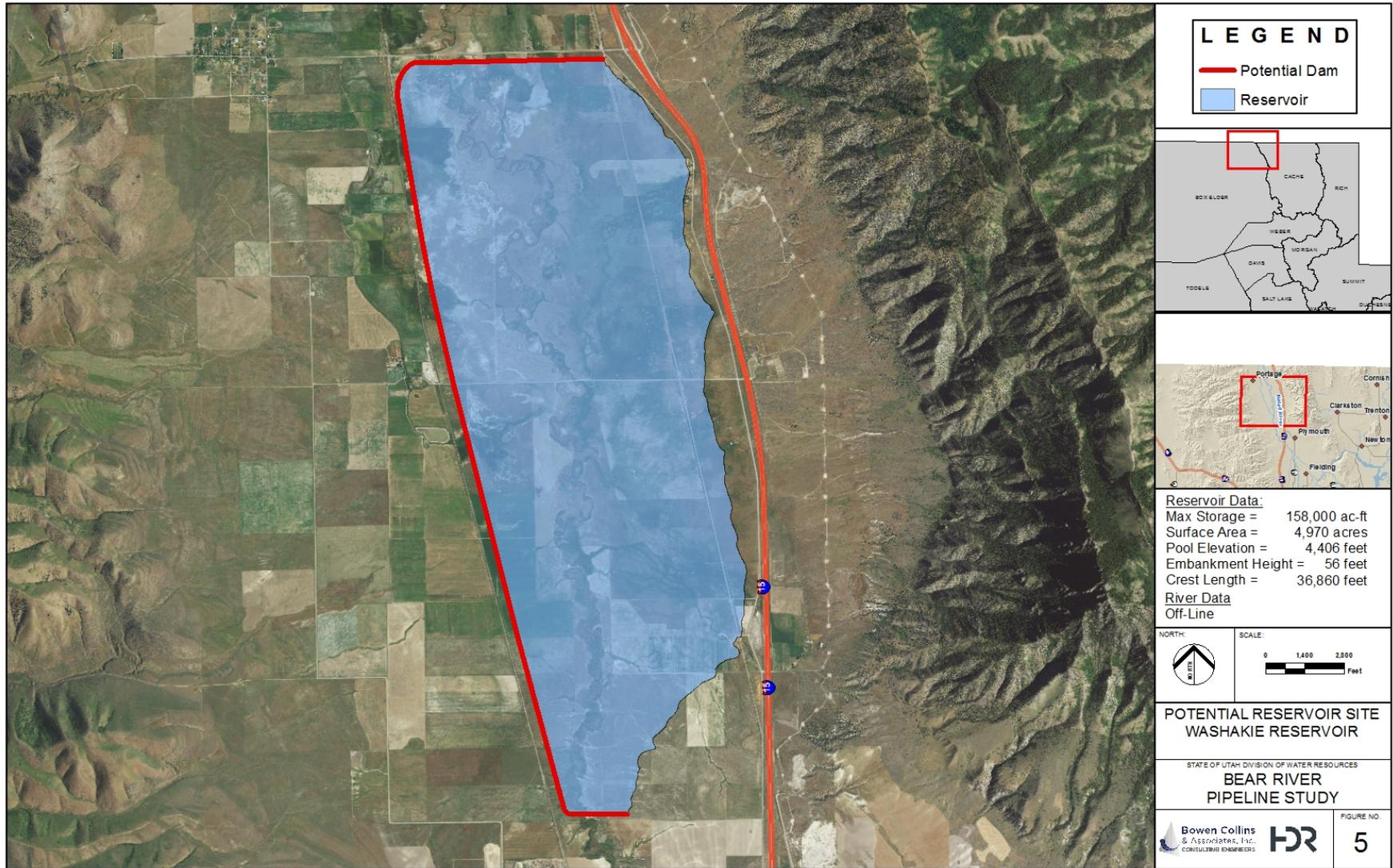
Temple Fork Reservoir

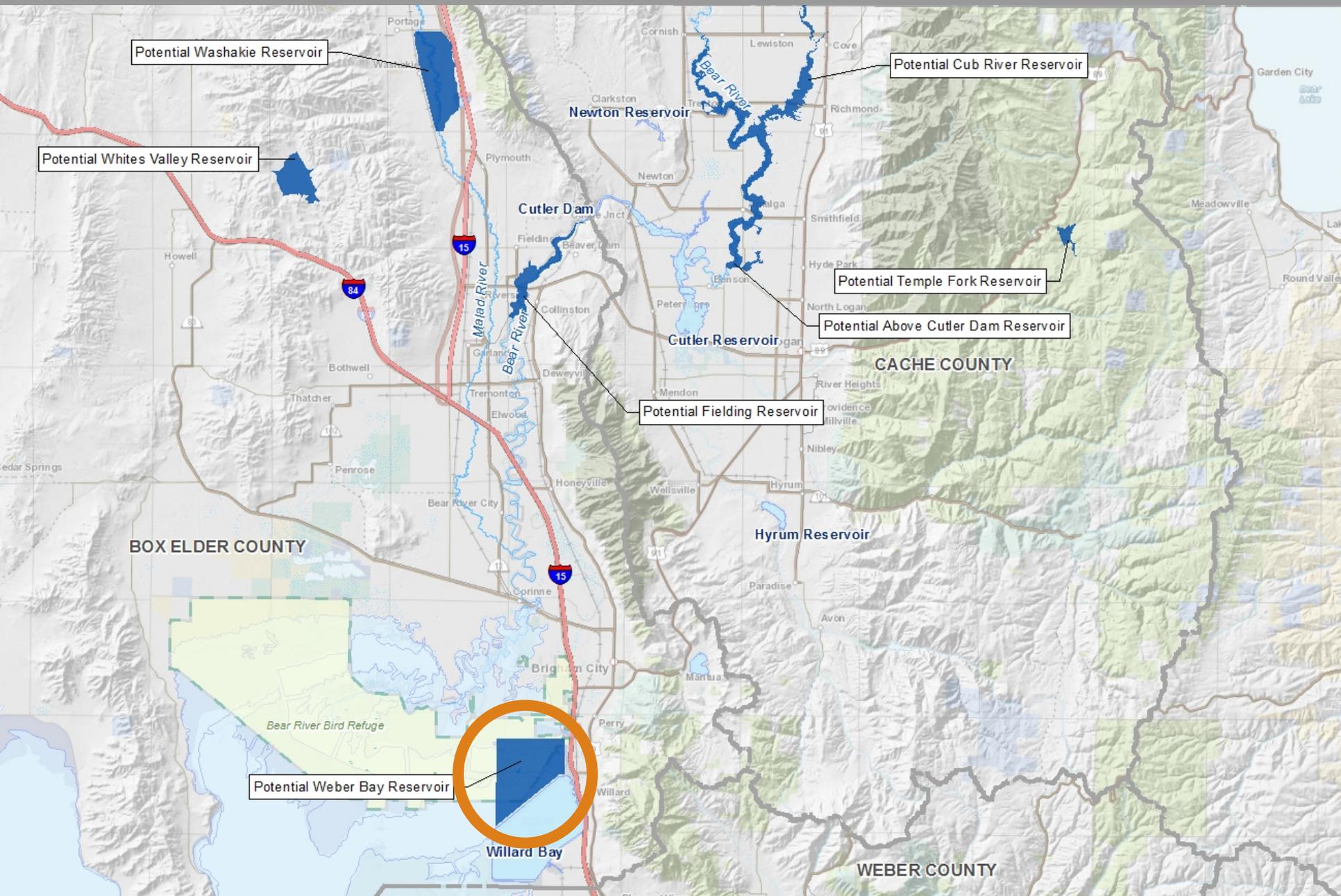


© State of Utah Division of Water Resources Bear River Pipeline Phase 2 2014 GIS Project Reservoir Site - Figure.mxd, 06/04/2015



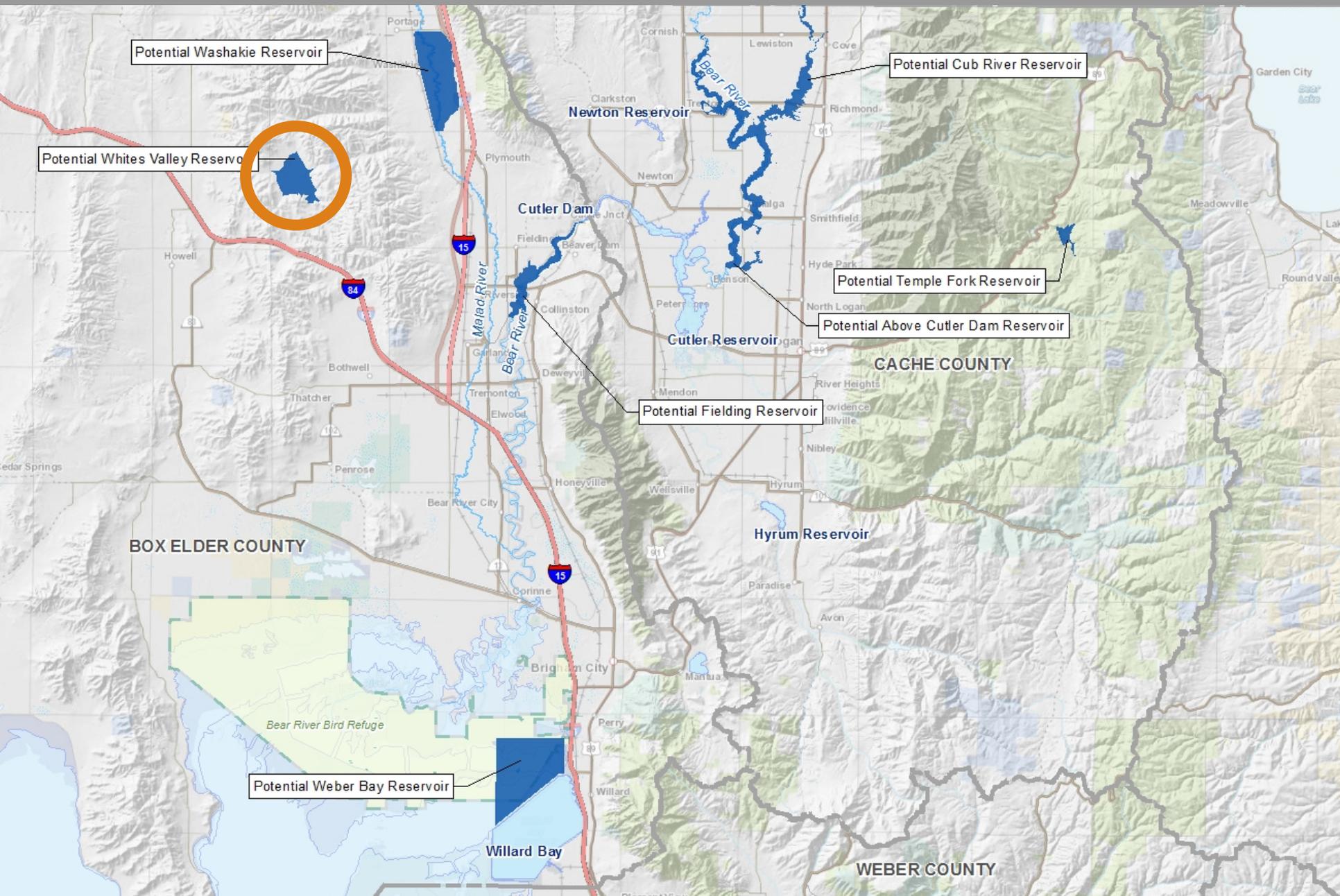
Washakie Reservoir



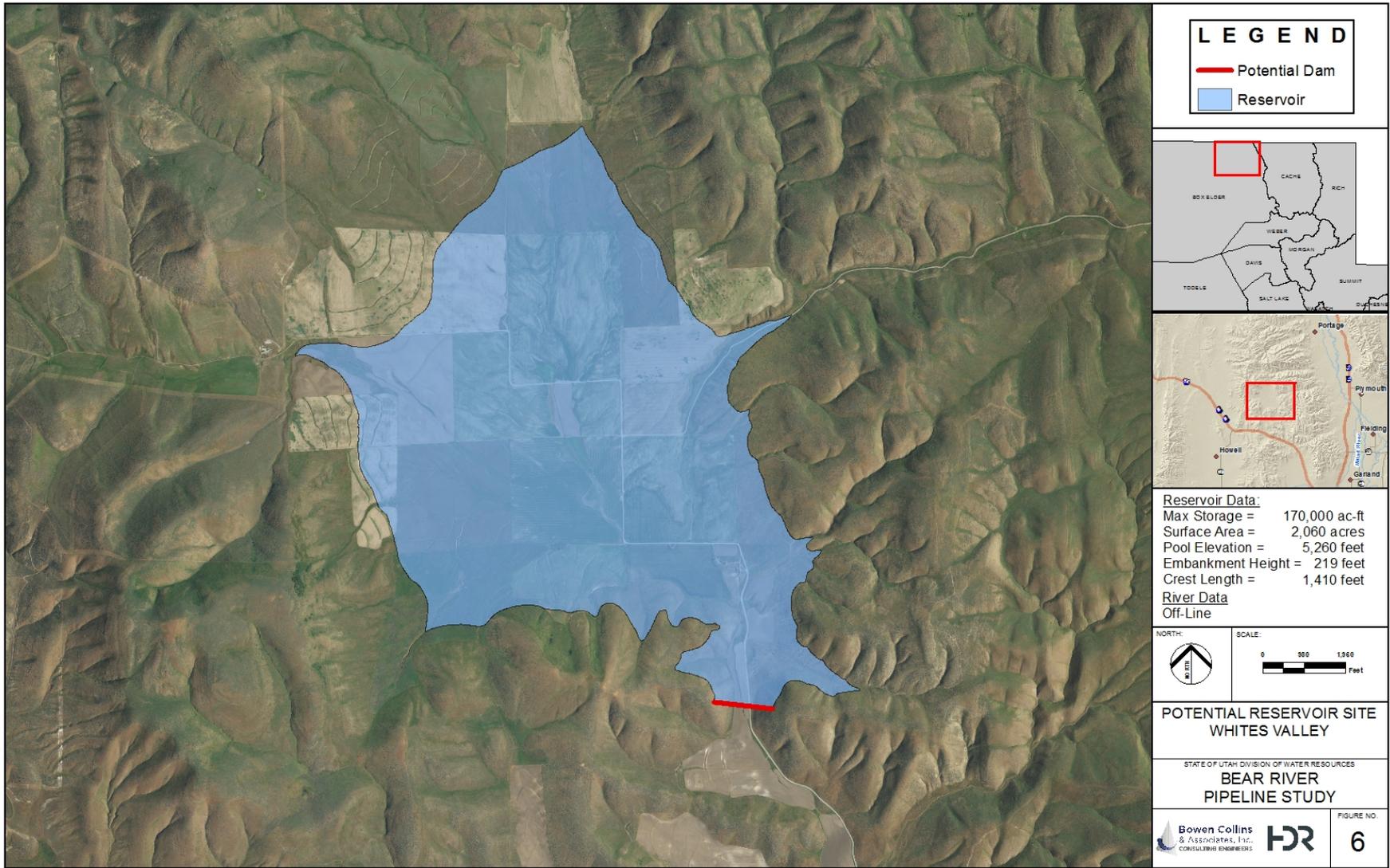


Weber Bay Reservoir





Whites Valley Reservoir

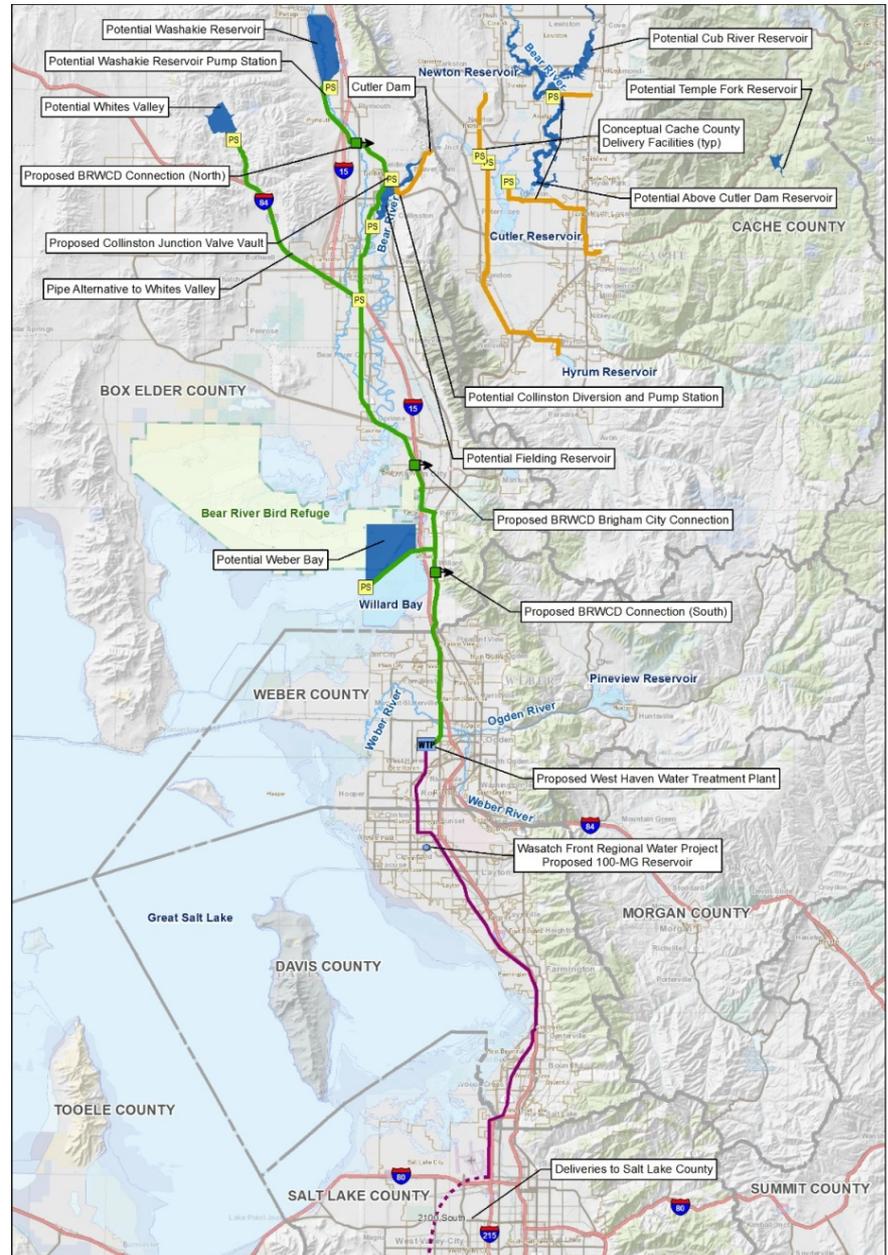


Potential Multi-Purpose Benefits

- Fisheries
- Recreation and trails
- Watershed health
- Late-season water supply
- Hydroelectric power generation

Conceptual Design

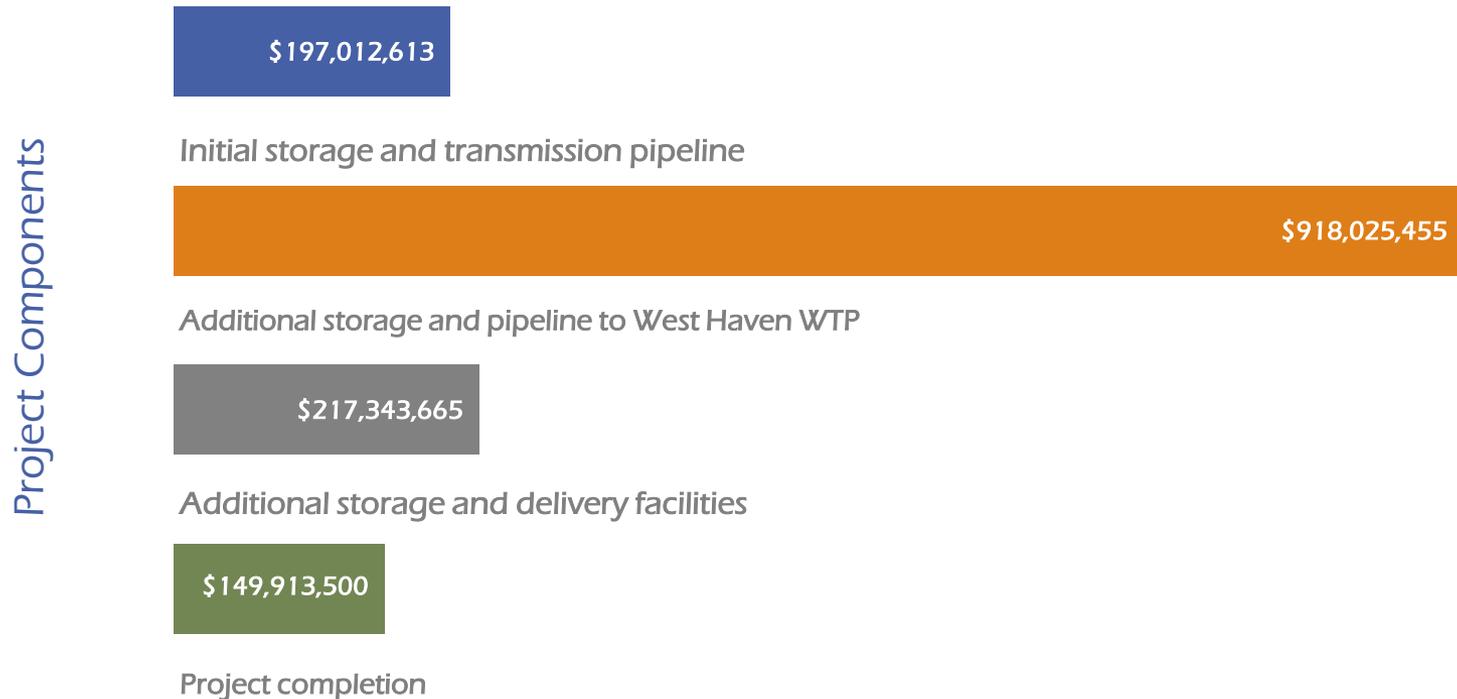
- Seven potential reservoir sites (only 2-3 needed)
- Raw water pipeline system to West Haven WTP
- Finished water pipeline from West Haven to Weber, Davis, and Salt Lake Counties
- Cache County delivery facilities



Agency Considerations

- Need for the water
- Bear River water quality
- Endangered species
- Other alternatives; example: Aquifer Storage and Recovery
- Flow regime of the Bear River
- Economic and environmental impacts to the Great Salt Lake
- Impacts to environmentally-sensitive areas, including the Bear River Bird Refuge.

Projected State Investment by Phase



Potential investment over four phases: \$1.5 billion

Potential Schedule:

