USDA
United States Department of Agriculture
Natural Resources Conservation Service

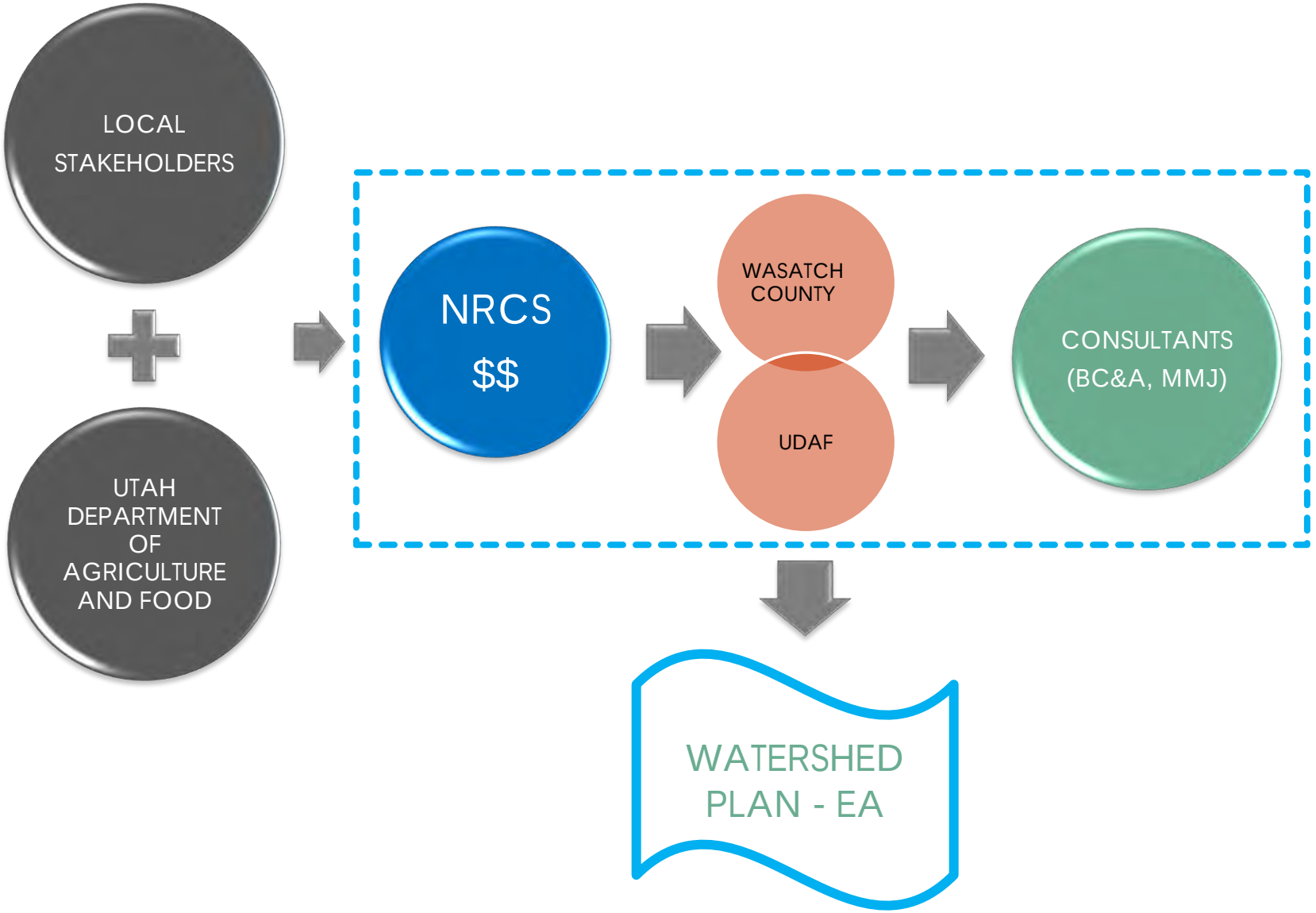
Tri-Valley Supplemental Watershed Plan Environmental Assessment Public Scoping Meeting

February 12, 2020

Introductions

- Wasatch Conservation District
- Utah Department of Ag and Food
- Natural Resources Conservation Service
- Wasatch County
- Bowen Collins & Associates
- McMillen Jacobs

BOWEN COLLINS & ASSOCIATES & McMILLEN JACOBS ASSOCIATES


LOCAL STAKEHOLDERS
UTAH DEPARTMENT OF AGRICULTURE AND FOOD
NRCS $$
WASATCH COUNTY
UDAF
CONSULTANTS (BC&A, MMJ)
WATERSHED PLAN - EA

Purpose of Meeting

- Explain the 3 project sites
- Explain the NEPA (National Environmental Policy Act) planning process
- Discuss issues
- Receive input (breakout sessions)

Other NRCS Projects

Plan-Environmental Assessments are currently in progress for the sites listed below:

- Duchesne County Water Conservancy District (DCWCD) Watershed Plan (Sponsor = Duchesne County Water Conservancy District)
- Cottonwood Creek Watershed-Joes Valley (Sponsor=Emery County)
- Ashley Valley Watershed (Sponsor=Uintah County)
- Santaquin City Watershed (Sponsor=Santaquin City, Utah)
- Upper Weber Basin Watershed Plan (Sponsor = Weber Basin Water Conservancy District)
- Lower Price River Watershed Plan-EA (Sponsor = UT Division of Wildlife Resource)
- Parowan Valley Watershed (Sponsor=Iron County)
- Warner Draw Watershed (Sponsor=Washington County)
- Cove Reservoir Watershed (Sponsor=Kane Co. Water Conservancy District
- North Ogden Watershed (Sponsor=Weber-Box Elder Conservation District)
- Uintah Water Efficiency Project Plan-EA (Sponsor = Uintah Water Conservancy District)
- Pleasant Grove-Mill Ditch Piping (Sponsor=Pleasant Grove City)
- Richfield-West Sevier Watershed (Flat Canyon) (Sponsor=Sevier County)
- Saratoga Springs Watershed (Sponsor = Saratoga Springs)
- Skull Valley Watershed (Sponsor = Tooele County)
- Tri Valley Watershed (Sponsor = Wasatch County)

Original Watershed Plan (1997)

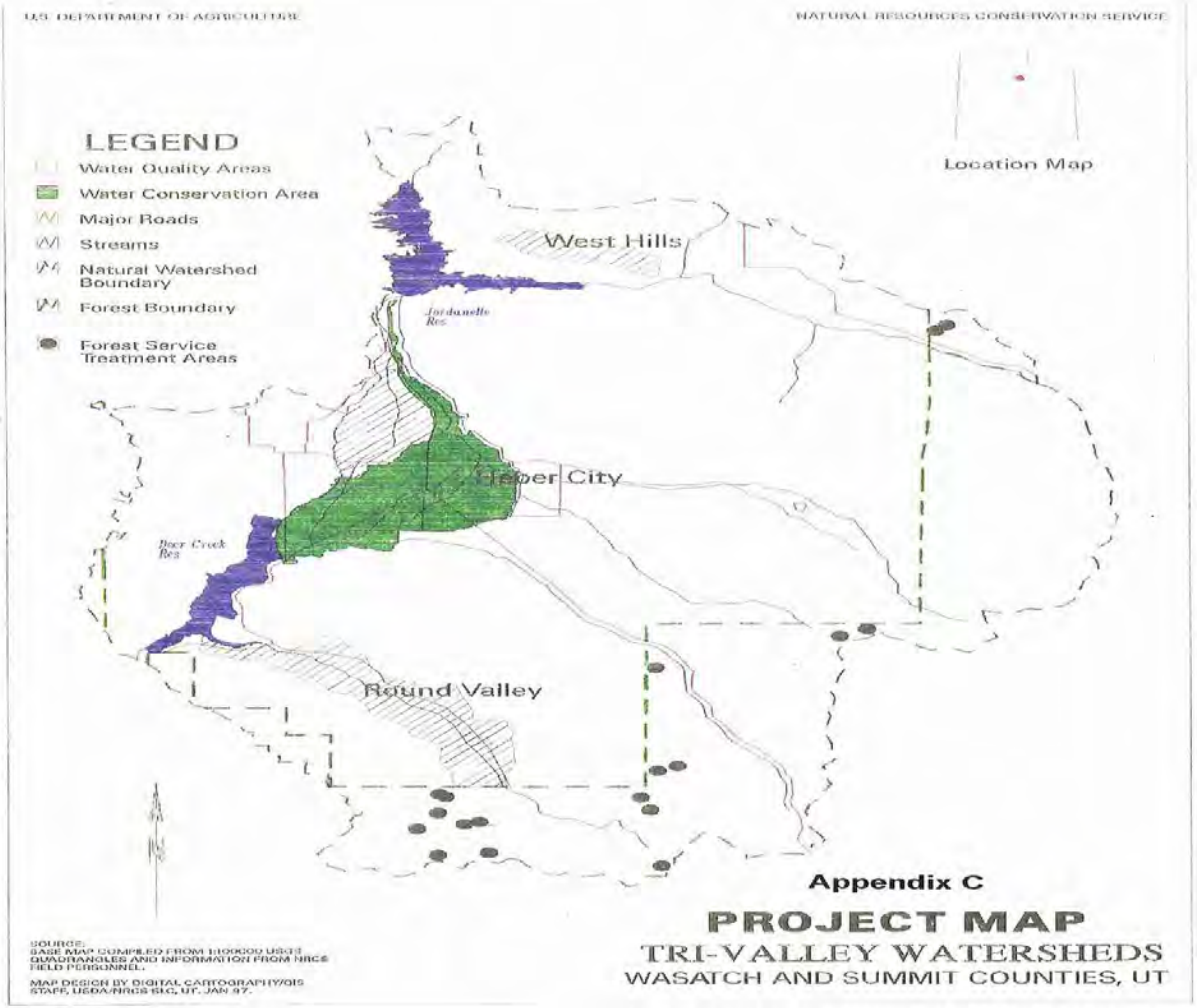
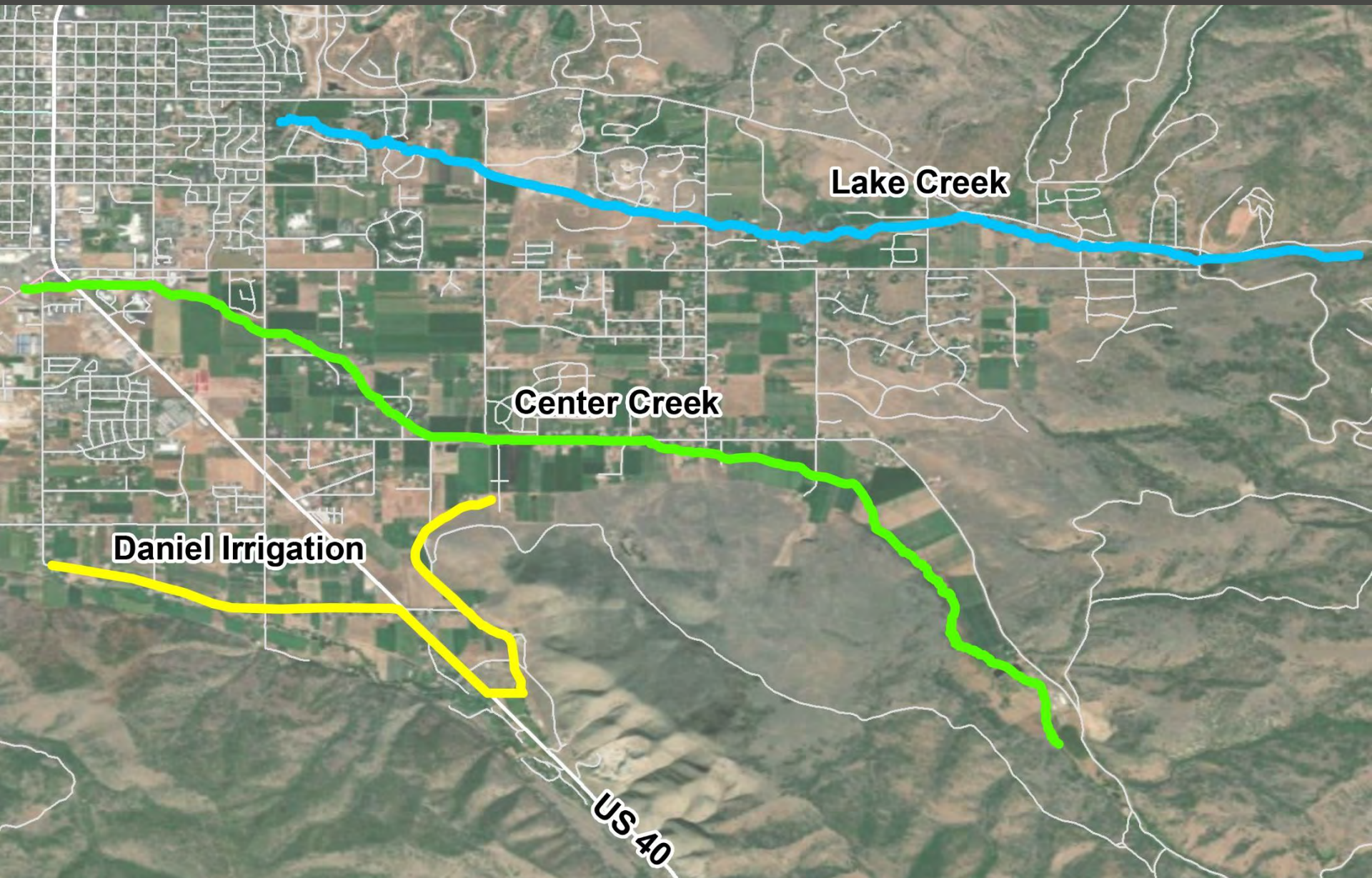


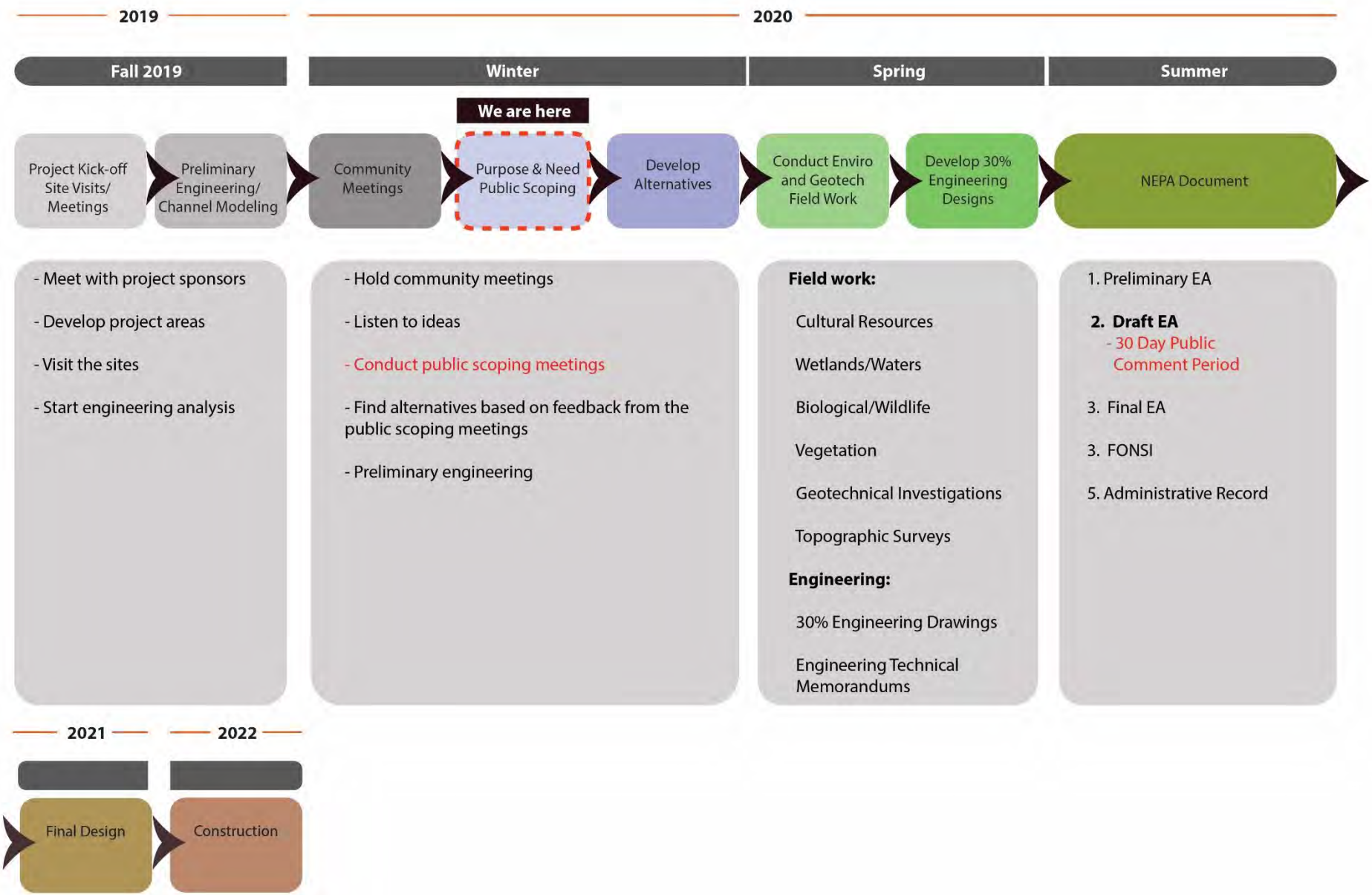
Table 2, Estimated Cost Distrubution-Structural and nonstructural measures
TriValley Watershed, Utah
(dollars)1/

	--Installation cost PL-566-----			Installation cost other funds			Total
	Construction	Project Administration	Total PL-566	Construction	Project Admin.	Total other	Installation Cost
Land Treatment-Accelerated							
pipeline	$805,206	$120,781	$925,987	$433,573	$4,336	$437,909	$1,363,896
irrigation systems	$805,572	$120,836	$926,408	$433,769	$4,338	$438,107	$1,364,514
animal waste mgt system	$341,250	$51,188	$392,438	$183,750	$1,838	$185,588	$578,025
riparian planting	$74,022	$11,103	$85,125	$39,858	$399	$40,257	$125,382
fencing	$84,770	$12,716	$97,486	$45,646	$456	$46,102	$143,588
off-stream Livestock Water	$51,271	$7,691	$58,961	$24,051	$241	$24,292	$83,253
livestock exclusion	$0	$0	$0	$600	$6	$606	$606
riparian pasture mgt	$0	$0	$0	$4,840	$48	$4,888	$4,888
riparian buffer strips	$0	$0	$0	$600	$6	$606	$606
prescribed grazing	$0	$0	$0	$13,451	$135	$13,586	$13,586
irrigation water mgt.	$0	$0	$0	$22,339	$223	$22,563	$22,563
nutrient mgt.	$0	$0	$0	$22,339	$223	$22,563	$22,563
streambank protection	$59,948	$8,992	$68,940	$32,127	$321	$32,448	$101,388
irrigation water control stc.	$68,640	$10,296	$78,936	$0	$0	$0	$78,936
Parshall flumes	$31,200	$4,680	$35,880	$16,800	$168	$16,968	$52,848
Measuring devises	$62,400	$9,360	$71,760	$33,600	$336	$33,936	$105,696
Prefab Slide Gates	$4,875	$731	$5,606	$2,625	$26	$2,651	$8,258
Constructed Wetlands	$6,500	$975	$7,475	$3,500	$35	$3,535	$11,010
Brush Management	$3,900	$585	$4,485	$2,100	$21	$2,121	$6,606
Embankment	$70,200	$10,530	$80,730	$37,800	$378	$38,178	$118,908
access roads	$34,136	$5,120	$39,256		$0	$0	$39,256
headcuts	$5,040	$756	$5,796		$0	$0	$5,796
seeding	$43,500	$6,525	$50,025		$0	$0	$50,025
riparian fencing	$23,608	$3,541	$27,149		$0	$0	$27,149
Subtotal-Land Treatment	**$2,576,038**	**$386,406**	**$2,962,444**	**$1,353,369**	**$13,534**	**$1,366,902**	**$4,329,346**
Structural Measures		15%					
irrigation systems	$200,000	$30,000	$230,000	$2,900,000	$29,000	$2,929,000	$3,159,000
heber floodway	$143,106	$25,254	$168,360	$143,106	$1,431	$144,537	$312,897
Subtotal-Structural	**$343,106**	**$55,254**	**$398,360**	**$3,043,106**	**$30,431**	**$3,073,537**	**$3,471,897**
						$0	$0
Total project	**$2,919,144**	**$441,660**	**$3,360,804**	**$4,396,475**	**$43,965**	**$4,440,439**	**$7,801,243**

Projects Identified



Where are we now?



Watershed Protection and Flood Prevention Program

- Watershed Protection and Flood Protection Act (PL 83-566) has three general purposes:
  - Preventing damage from erosion, floodwater, and sediment
  - Furthering the conservation, development, utilization, and disposal of water
  - Furthering the conservation and proper utilization of land
- Planning Constraints
  - Less than 250,000-acre watershed area
  - $25 million requires a Plan-EIS

NEPA Plan-EA Process

- Conducted a Project Kick-Off Meeting
- Data Search, Data Collection
- Preliminary Engineering/Hydrology Modeling
- Meet with the Local Residents (Community Meeting)
- Public Scoping Meeting (Open Until March 2, 2020)
- Field Reconnaissance
- Geotechnical Engineering
- Concept Design Plans (~30%)
- Engineering Report/Technical Memorandum (Investigation & Analysis Report)

NEPA Plan-EA Process

- Federal Funding Requires Analysis of the Project under NRCS NEPA Regulations
- Cooperating Agency Coordination with Federal and State Agencies
- Public Scoping & Comment Period (30 Days)

  Identify resource concerns, get agency/public/ sponsor/stakeholder input, discuss problems & potential alternatives
- Concept Design & Engineering Analysis
- Agency Coordination

  USACE Section 404 Coordination, USFWS Section 7 Consultation, SHPO Section 106 Consultation, Cooperating Agencies, State Agencies, Stakeholders

NEPA Process (Plan-EA)

- Internal Preliminary Draft Plan-EA
- Draft Plan-EA

  Public review and comment period (30 days) of Plan-EA that includes alternatives and environmental impacts

- Final Plan-EA

  Final EA document that Incorporates Draft EA comments

- Finding of No Significant Impact (FONSI) Or Preparation of Environmental Impact Statement (EIS)
- Administrative Record

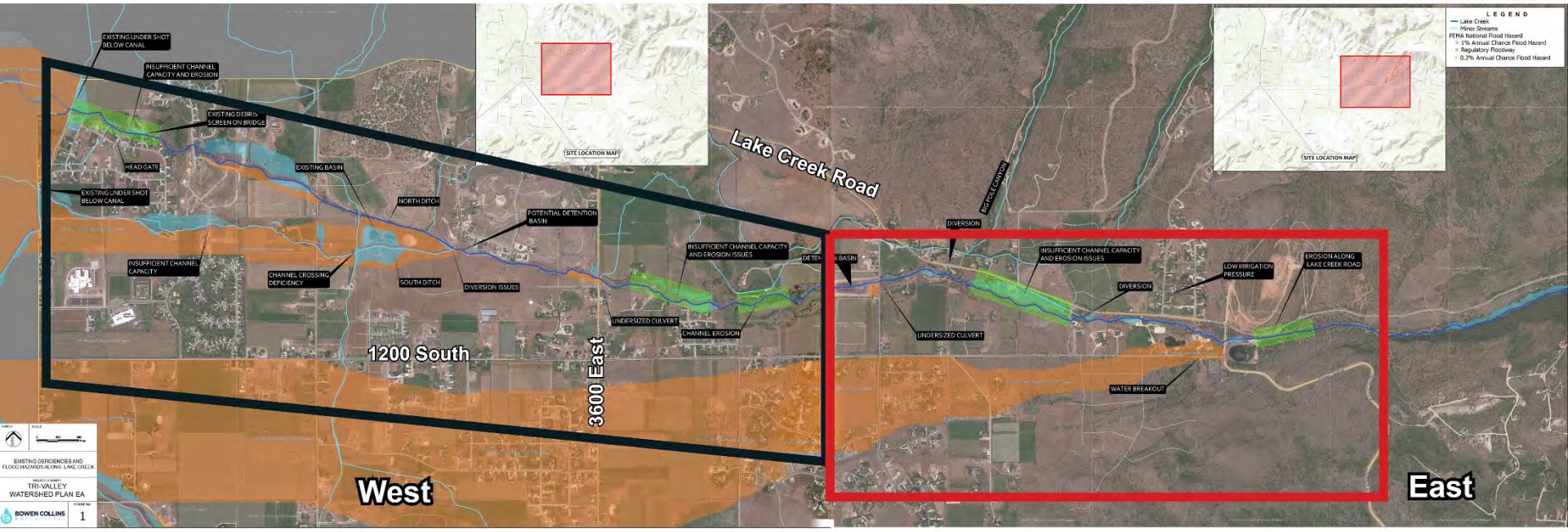
Watershed Protection and Flood Prevention Program

Authorized Purpose	Description	Cost Share Construction		Cost Share Engineering		Cost Share (Real Property Rights)	
		NRCS	Sponsor	NRCS	Sponsor	NRCS	Sponsor
Flood Protection	Measures to reduce or prevent floodwater damages by reducing runoff, erosion and sediment	100%	0%	100%	0%	0%	100%
Watershed Protection	Onsite treatment of watershed natural resources to reduce pollutants related to floodwater, erosion, sediment and agriculture	Variable - up to 100%	Variable	100%	0%	0%	100%
Public Recreation	Allowed only when Sponsor agrees to operate and maintain a reservoir or other area for public recreation. Measures must include only minimum basic facilities needed for public health and safety and access to and use of the area.	Up to 50%	≥50%	100%	0%	Up to 50%	≥50%
Public Fish & Wildlife	Allowed only when Sponsor agrees to operate and maintain a reservoir or other area for public fish and wildlife access. Measures installed for public use of areas developed to improved habitat, growth, and development of fish and wildlife may be included.	Up to 50%	≥50%	100%	0%	Up to 50%	≥50%
Agricultural Water Management	Includes drainage, ground water recharge, irrigation, water conservation, water quality improvement, and agricultural water supply.	Up to 75%	≥25%	≤ 100%	≥0%	0%	100%
Municipal & Industrial Water Supply	Measures necessary to provide storage capacity in reservoirs to increase the availability of water for present and future municipal and industrial use.	≤50%	≥50%	0%	100%	0%	100%
Water Quality Management	Provides water storage capacity in reservoirs for regulation of stream flow to improve water quality in streams.	Variable	Variable	Up to 100%	≥ 0%	0%	100%
Watershed Structure Rehabilitation	Authorizes financial assistance to local organizations to cover a portion of the costs of rehabilitating dams originally constructed as part of PL 83-566, PL-78534 the pilot watershed program, or the Resource Conservation and Development Program.	65%	35%	100%	0%	0%	100%

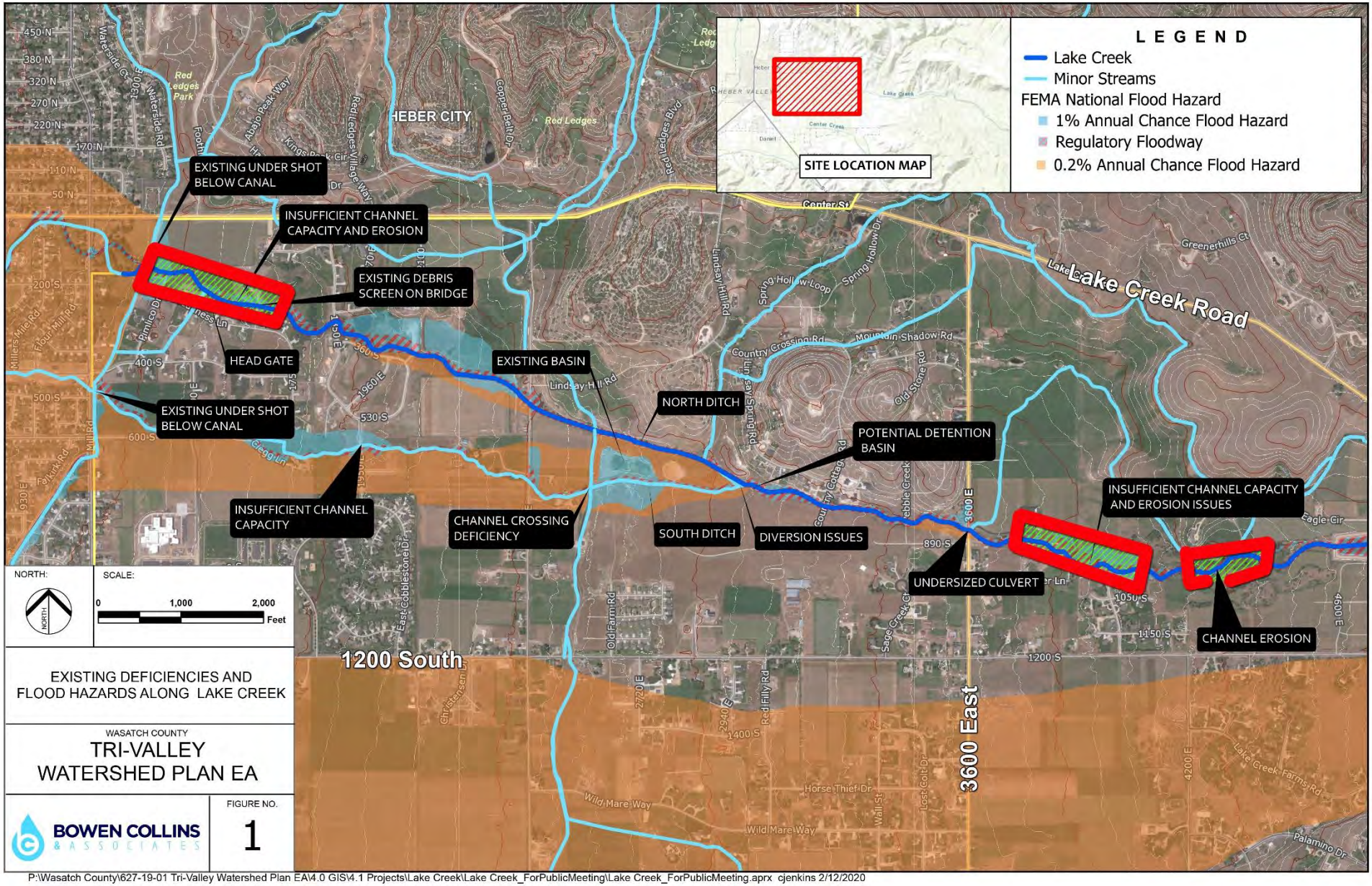
Lake Creek Existing Conditions

- Channel Capacity Deficiencies
- Channel Erosion
- Issues with Irrigation Diversions
- Undersized Culverts and Pipelines
- Issues with Debris
- Development adjacent to the Creek

Lake Creek


EXISTING UNDER SHOT BELOW CANAL
INSUFFICIENT CHANNEL CAPACITY AND EROSION
EXISTING DEBRIS SCREEN ON BRIDGE
HEAD GATE
EXISTING BASIN
EXISTING UNDER SHOT BELOW CANAL
NORTH DITCH
POTENTIAL DETENTION BASIN
INSUFFICIENT CHANNEL CAPACITY
CHANNEL CROSSING DEFICIENCY
SOUTH DITCH
DIVERSION ISSUES
INSUFFICIENT CHANNEL CAPACITY AND EROSION ISSUES
UNDERSIZED CULVERT
CHANNEL EROSION
SITE LOCATION MAP
1200 South
3600 East
West
Lake Creek Road
BEFORE CANYON
DIVERSION
INSUFFICIENT CHANNEL CAPACITY AND EROSION ISSUES
LOW IRRIGATION PRESSURE
EROSION ALONG LAKE CREEK ROAD
DIVERSION
UNDERSIZED CULVERT
WATER BREAKOUT
SITE LOCATION MAP
LEGEND
Lake Creek
Minor Streams
FEMA National Flood Hazard
1% Annual Chance Flood Hazard
Regulatory Floodway
0.2% Annual Chance Flood Hazard
EXISTING DEFICIENCIES AND FLOOD HAZARDS ALONG LAKE CREEK
TRI-VALLEY WATERSHED PLAN EA
BOWEN COLLINS
1
East

Lake Creek Existing Issues



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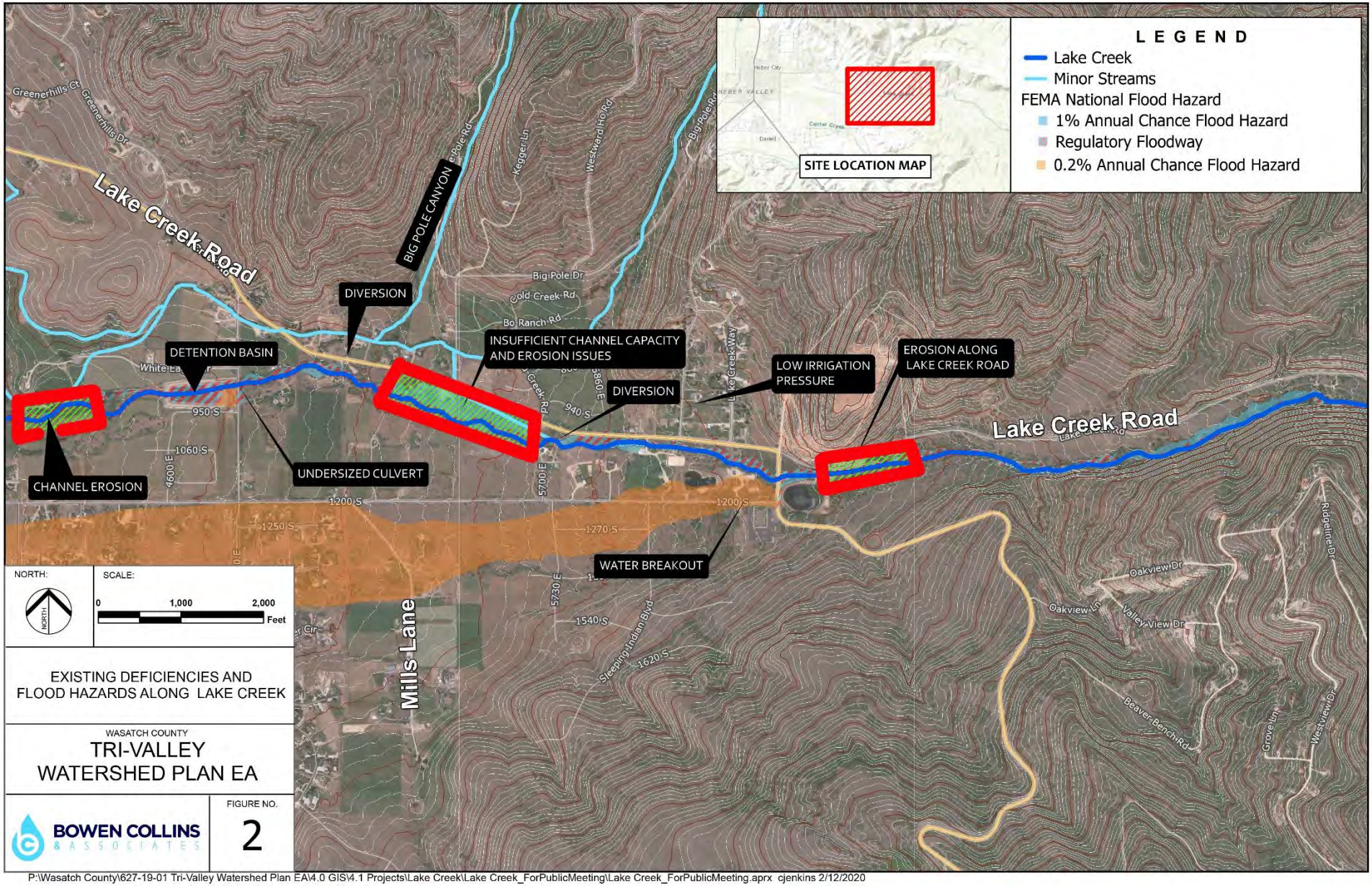
Lake Creek Existing Issues



EXISTING DEFICIENCIES AND FLOOD HAZARDS ALONG LAKE CREEK

WASATCH COUNTY
TRI-VALLEY WATERSHED PLAN EA

BOWEN COLLINS & ASSOCIATES

FIGURE NO. 2

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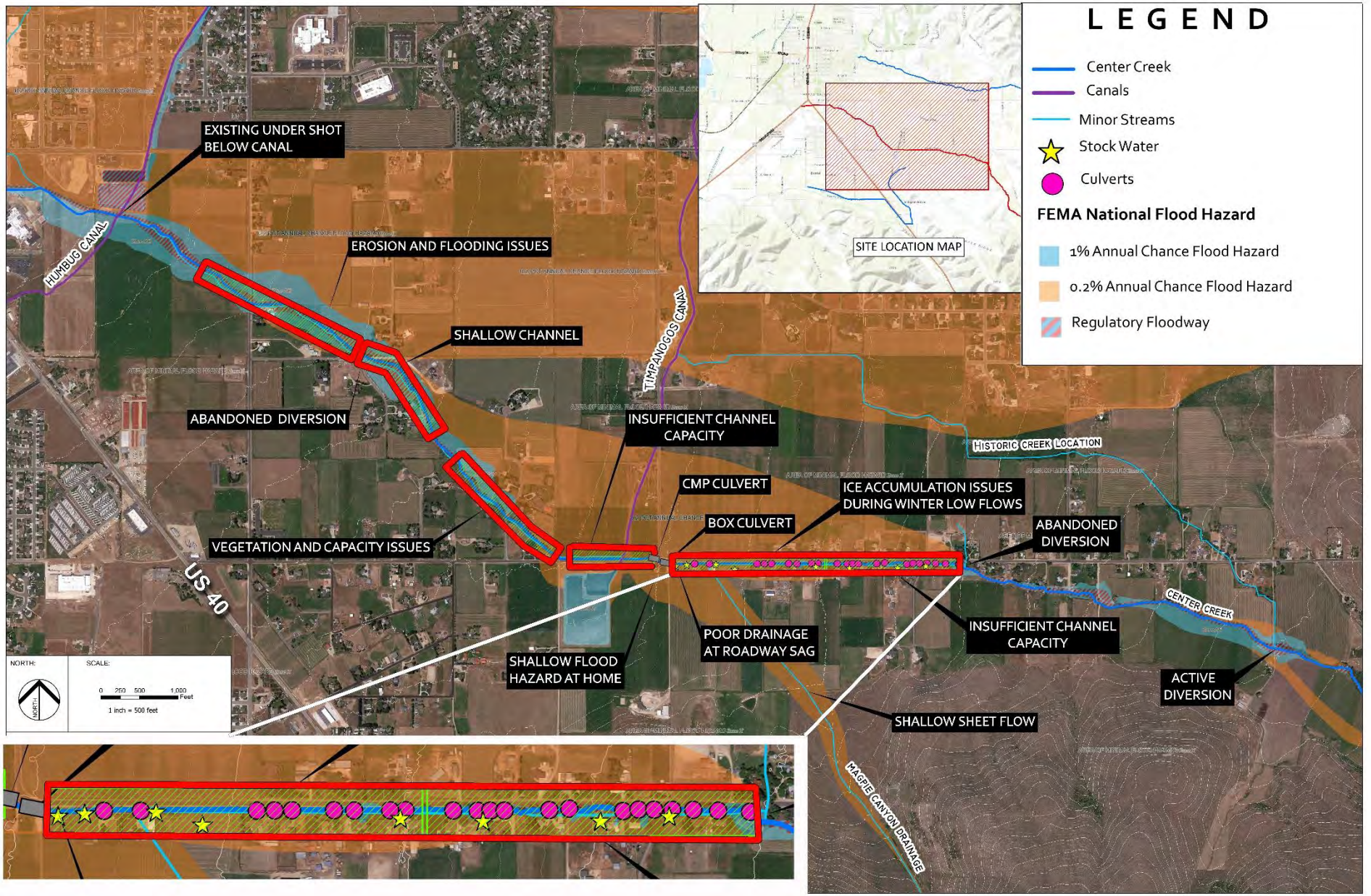
Center Creek Existing Conditions

- Snow and Ice Accumulation on Center Creek Road
- Channel Capacity Deficiencies
- Channel Erosion
- Issues with Irrigation Diversions
- Undersized Culverts and Pipelines
- Shallow Flood Hazards

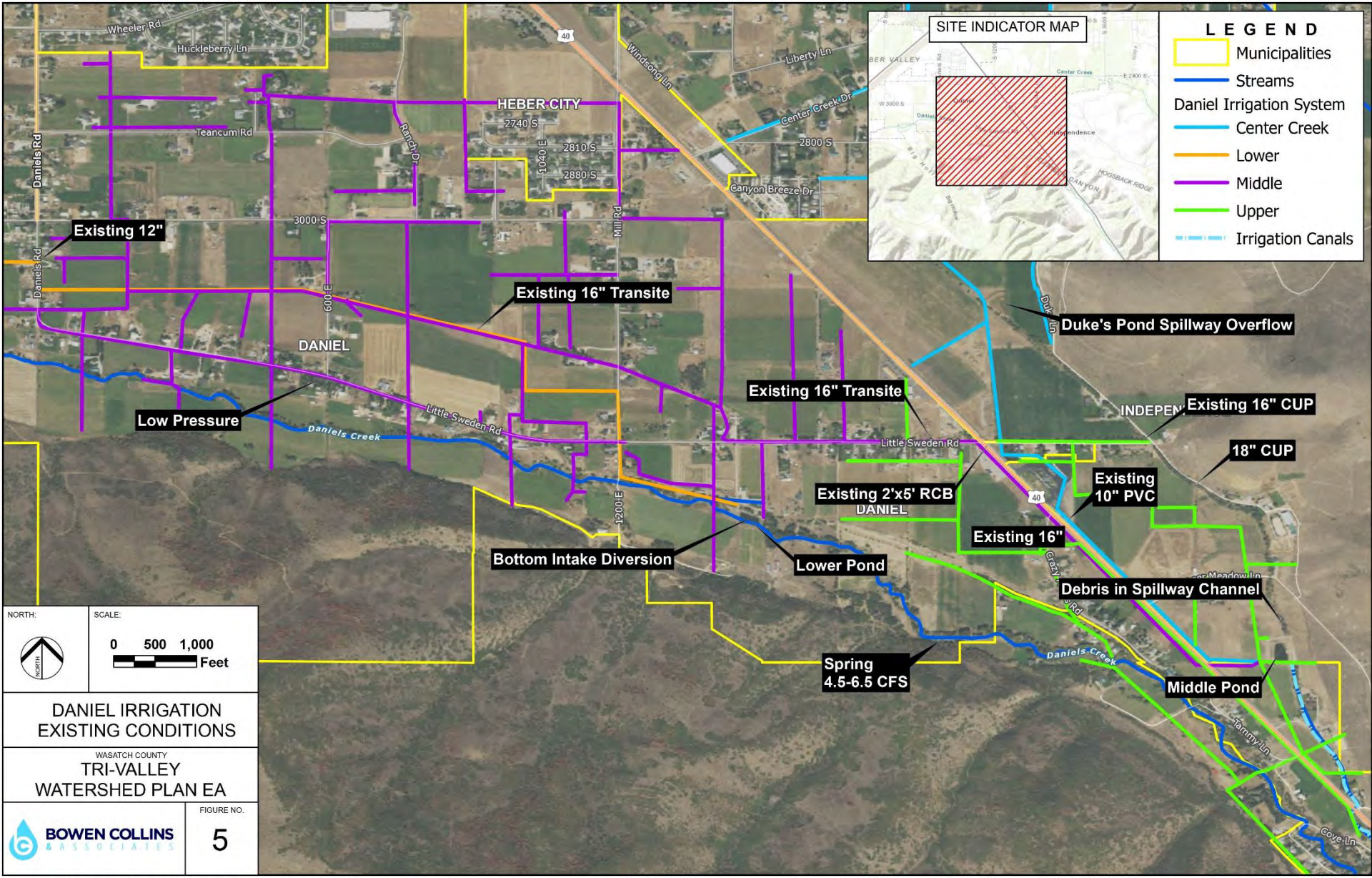
Center Creek Existing Issues



Daniel Irrigation Existing Conditions

- Pipe Capacity Deficiencies
- Low Operating Pressure
- Existing Pipeline Location
- Middle Pond Water Source Improvements

Daniel Irrigation Existing Conditions



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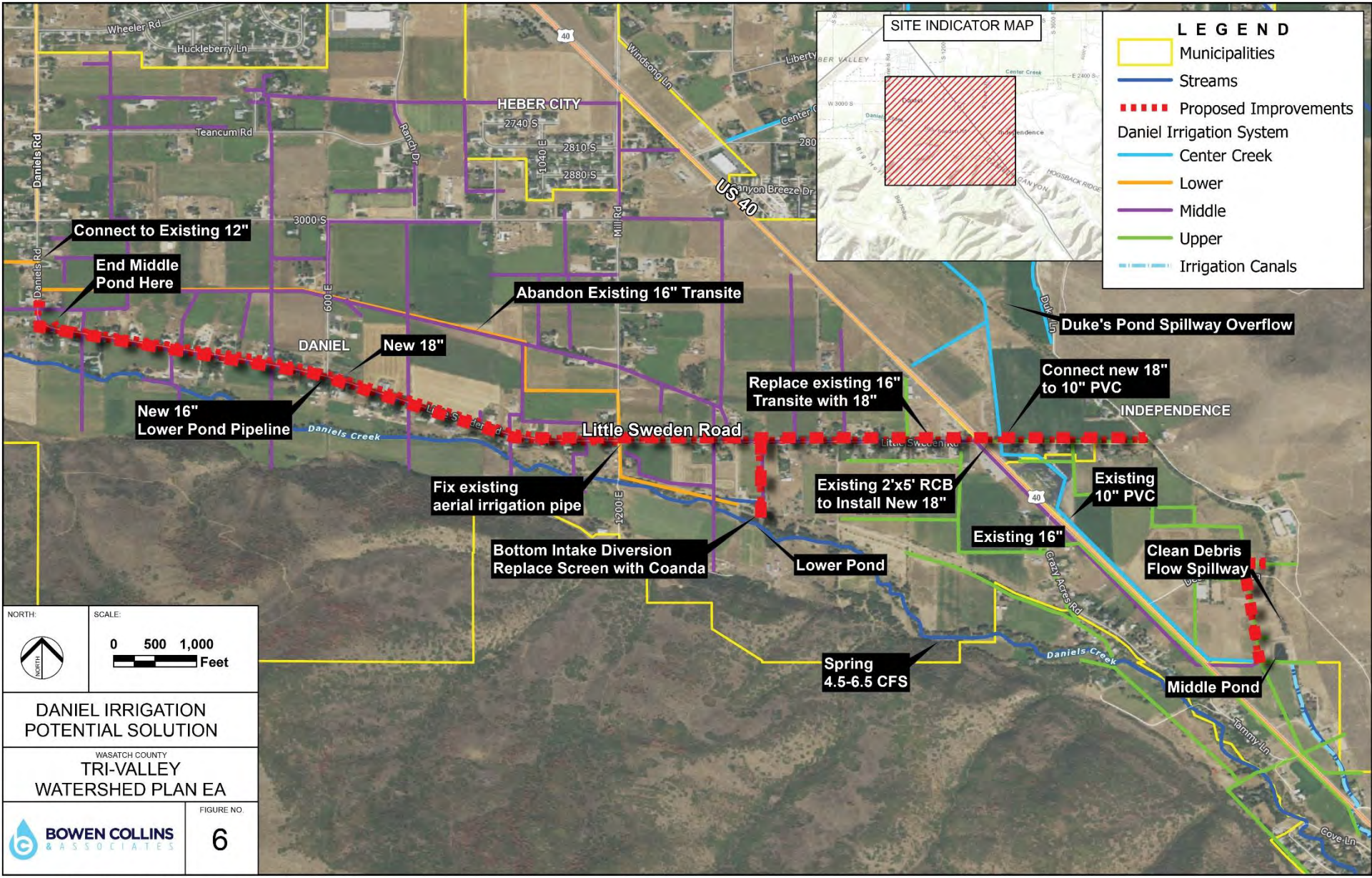
Daniel Irrigation Proposed



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Questions

Breakout Sessions

- Lake Creek (Room 159)
- Center Creek (Stay Here)
- Daniel Irrigation (Room 158)