



**Update on
Bishop Creek
Vision Project
for Inyo Mono
IRWM**

- TMDL-alt project to address bacteria impairment in Bishop Creek, Inyo Co.
- Collaborative approach with stakeholders rather than a “traditional” TMDL

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Overview – update since January 2018 IRWM discussion

- **What is a Vision Project?**
- **How were water quality issues identified in Bishop?**
- **Vision Project work completed to date**
- **Stakeholder engagement for data inventory**
- **Next steps**

What is a Vision Project?

- 2013: USEPA announces a new collaborative framework for implementing the CWA Section 303(d) program called the *Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program* (The Vision).
- Watershed-wide planning initiative focused on improving WQ
- Provides flexibility in using available tools beyond TMDLs to attain WQ restoration

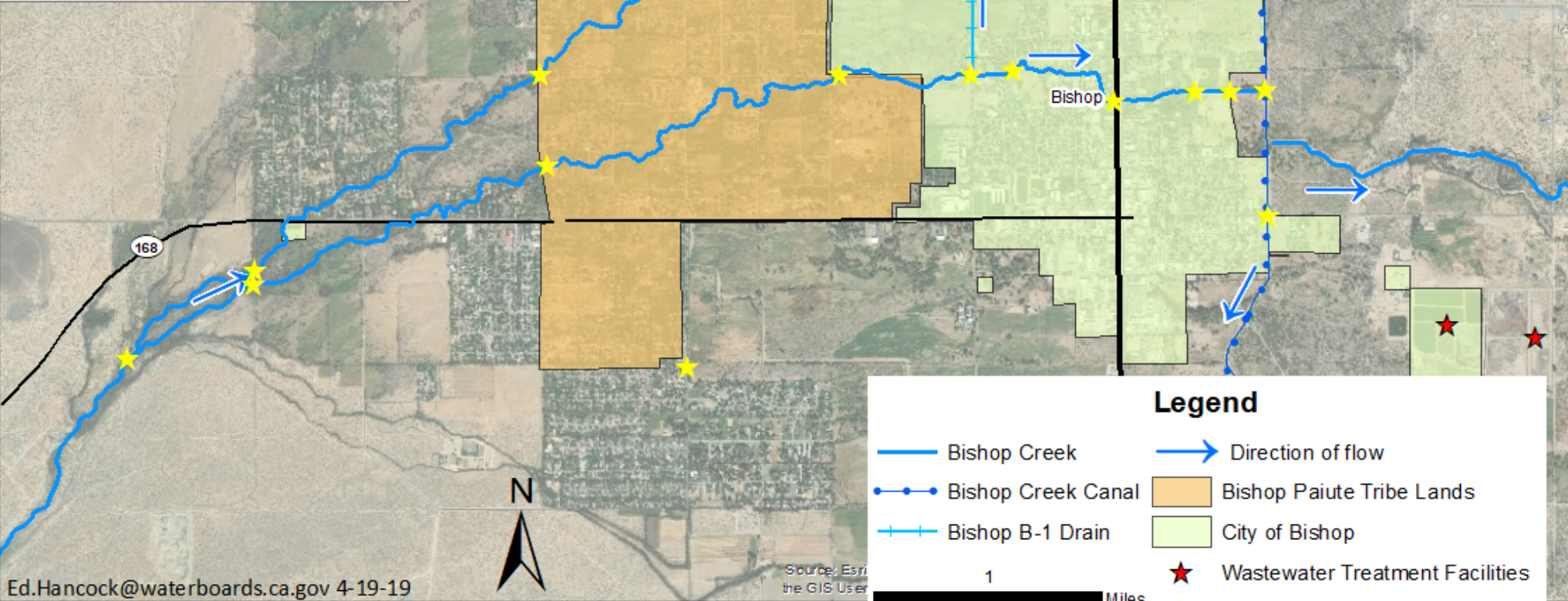
How were bacteria issues identified in Bishop Creek?

- **2012/2013: SWAMP screening detects unusually high bacteria concentrations**
- **2013-2016: Diagnostic sampling reveals bacteria concentrations in the creek as well above WQOs**
 - **Sampling strategy was somewhat “shotgun”; data set is useful for identifying that there is a water quality impairment, but less useful for source analysis due to temporal variation in site visits**
- **2014: Contractor working for Lahontan performs MST analysis in Bishop Creek as part of wider-focused Eastern Sierra Bacteria Study**

SWAMP sampling locations, Bishop Creek, CA



Inset Map: Location of Bishop, California





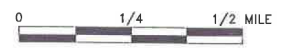
Legend

- Bishop Creek
- Bishop Creek Canal
- Bishop B-1 Drain
- Direction of flow
- Bishop Paiute Tribe Lands
- City of Bishop
- Wastewater Treatment Facilities
- Lahontan Monitoring Sites

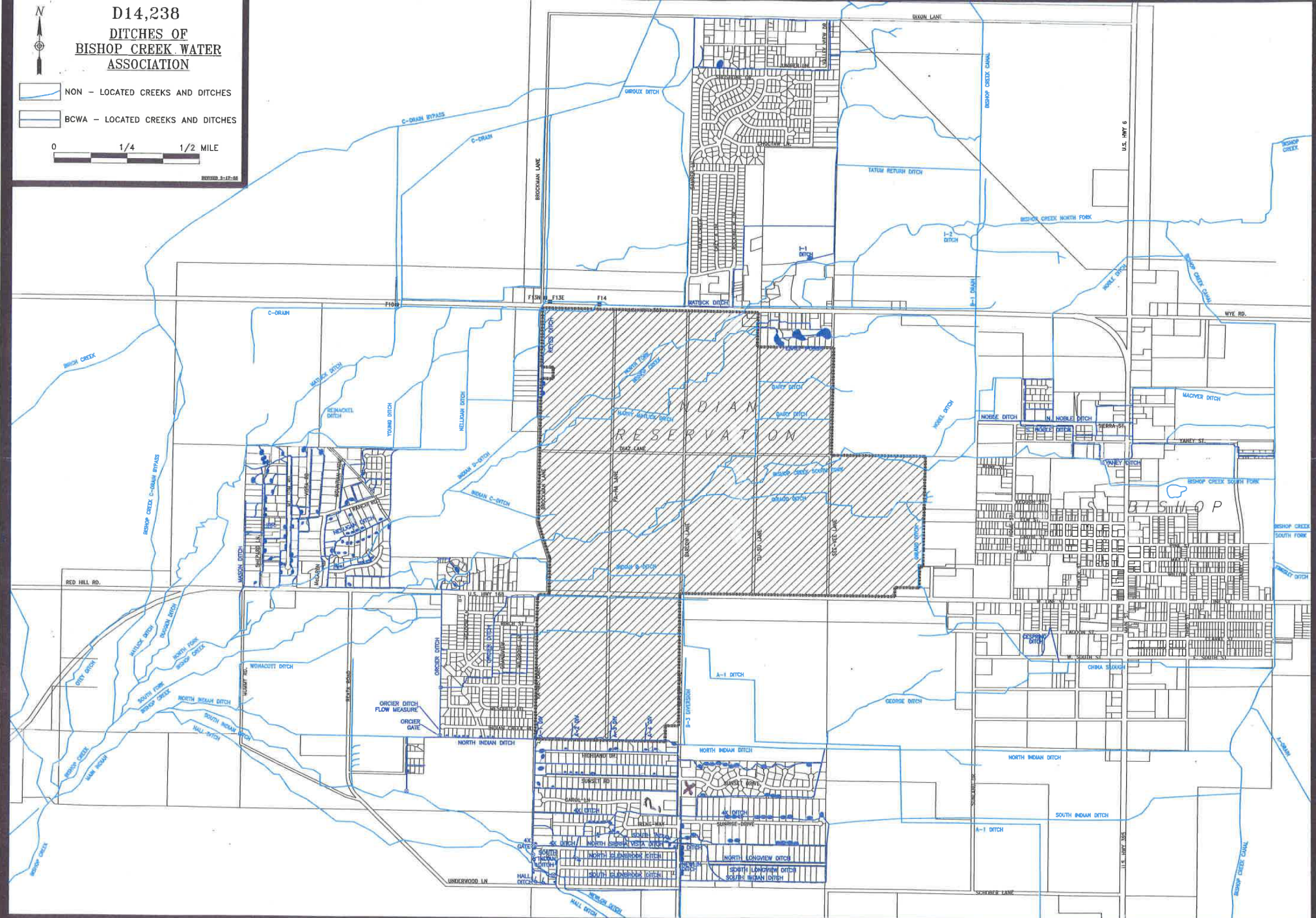


D14,238
 DITCHES OF
 BISHOP CREEK WATER
 ASSOCIATION

-  NON - LOCATED CREEKS AND DITCHES
-  BCWA - LOCATED CREEKS AND DITCHES



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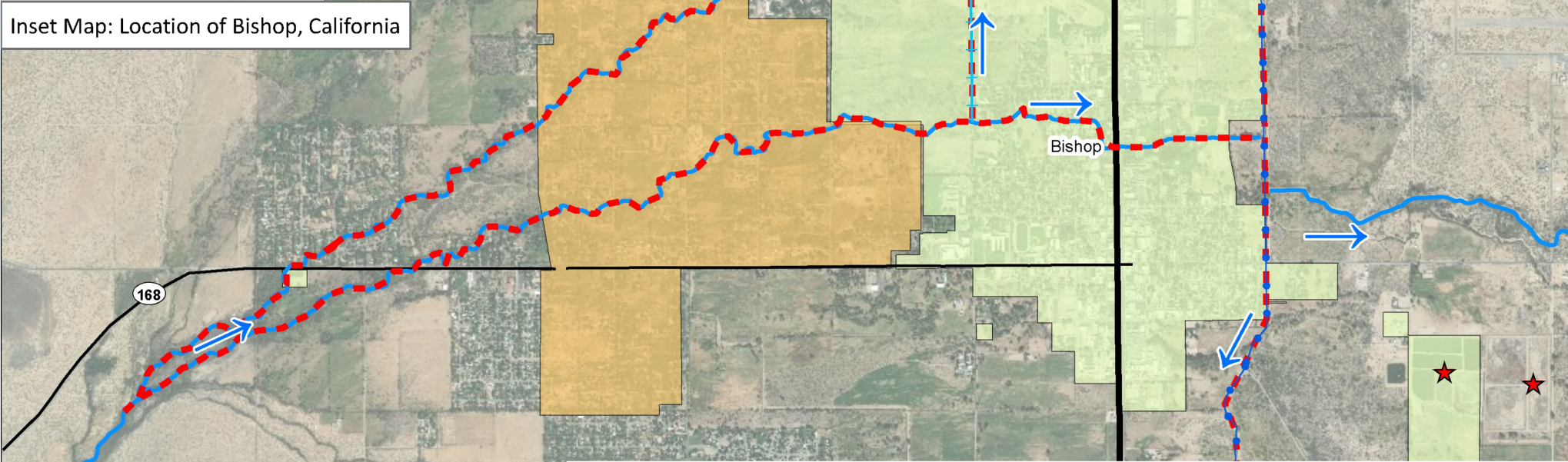
Vision Project Timeline of Key Events

- **2014: Inyo County Health Dept. posts warning signs in portions of creek where water contact rec is known to occur**
 - **2014-present: Paiute Tribe continues to post warning signs on sections of the creek which flow through tribal lands**
- **303(d) listing for Indicator Bacteria due with adoption of pending 2018 Integrated Report (likely November 2019)**
- **2015: In anticipation of listing, Water Board identifies Bishop Creek as Vision Project candidate**
- **2017: Staff begin work on Vision Project Plan**
- ***Expected: 2022 Vision Project Plan complete***

Stream reaches impacted by indicator bacteria, Bishop Creek



Inset Map: Location of Bishop, California



Legend

- Red dashed line: 303(d) impairments for indicator bacteria
- Blue line: Bishop Creek
- Blue line with dots: Bishop Creek Canal
- Blue line with cross-ticks: Bishop B-1 Drain
- Blue arrow: Direction of flow
- Orange box: Bishop Paiute Tribe Lands
- Green box: City of Bishop
- Red star: Wastewater Treatment Facilities
- Red cross-hatch box: Primary impact grazing lease
- Yellow cross-hatch box: Secondary impact grazing lease
- Light blue box: Residential irrigation areas

1 Miles

Potential sources of bacteria

- **Grazing related sources from numerous grazing leases**
- **Urban and suburban runoff (pet wastes, ornamental residential creek diversions, urban NPS)**
- **Wastewater exfiltration (sewer laterals, WWTP collection infrastructure)**
- **Natural sources**

Vision Project Work Completed to Date

- **Planning and Outreach Documents (Project Charter, Problem Statement, Fact Sheet, Draft Outreach Plan)**
- **Initial stakeholder outreach: Paiute Tribe, LADWP, City of Bishop, Inyo County, Eastern Sierra Land Trust, Eastern Sierra CSD**
- **Website and listserve**
https://www.waterboards.ca.gov/lahontan/water_issues/programs/mdl/bishopcreek.html
- **Sanitary Sewer Audit (April 2018) led by staff from Lahontan South Office (Victorville)**
- **Data analysis identified four (4) grazing leases west of the City of Bishop which are probable major contributors to bacteria in the creek**

Two Key Stakeholders Contributing data to Vision Project (to date)

- **Bishop Paiute Tribe**
 - Collecting *E. coli* data for ~20 years above and below tribal lands (4 locations, 2 on each fork of creek)
- **Los Angeles Dept. of Water and Power (LADWP)**
 - Major land owner in Owens Valley
 - Collecting *E. coli* and MST data from Bishop Creek since 2014



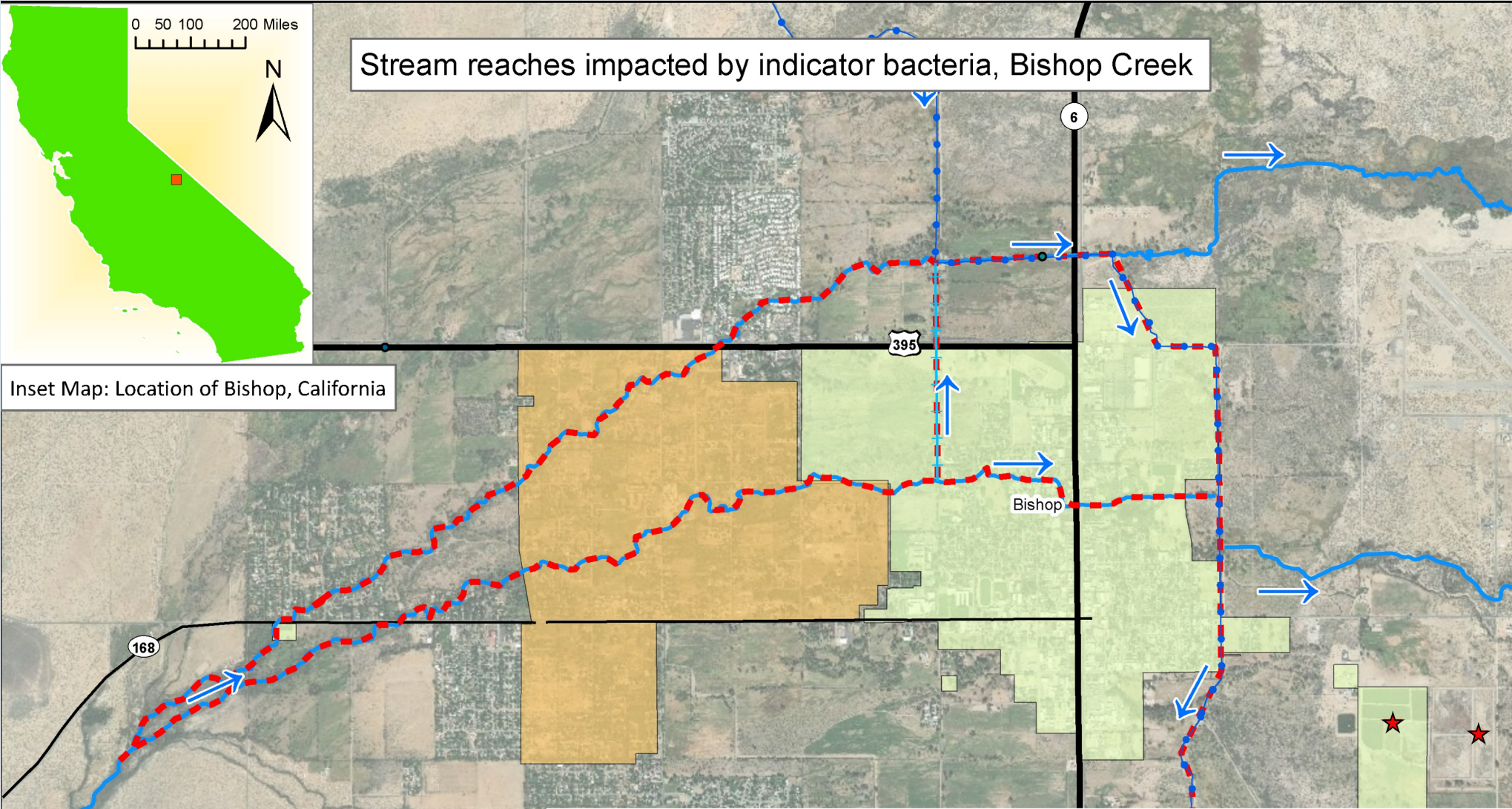
If Other Stakeholders have Bishop Creek Data for Us to Consider, Data Sharing Resources Are Available

- **Regional Monitoring Coordinator can provide training and information to stakeholders who collect water quality data and are willing/desire to upload that data to CEDEN**
- **Vision Project staff can connect stakeholders with the regional data center (RDC) or to the Regional Monitoring Coordinator to assist in data upload**

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Next Steps for Vision Project

- **Detailed source analysis using Lahontan, LADWP, Tribe data, available MST data**
- **Stakeholder outreach and education**
 - **Connect ranchers with NRCS**
 - **Healthy watershed education program in collaboration with Paiute Tribe**
- **Water Board is preparing a waste discharge permit (WDR) for LADWP grazing lands (planned adoption by November 2019)**
 - **Vision staff expect that WDR will go a long way to attain WQOs in Bishop Creek**
 - **WDR will be a major implementation tool for Vision Project**
- **Complete Vision Project Plan document**

Questions?

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