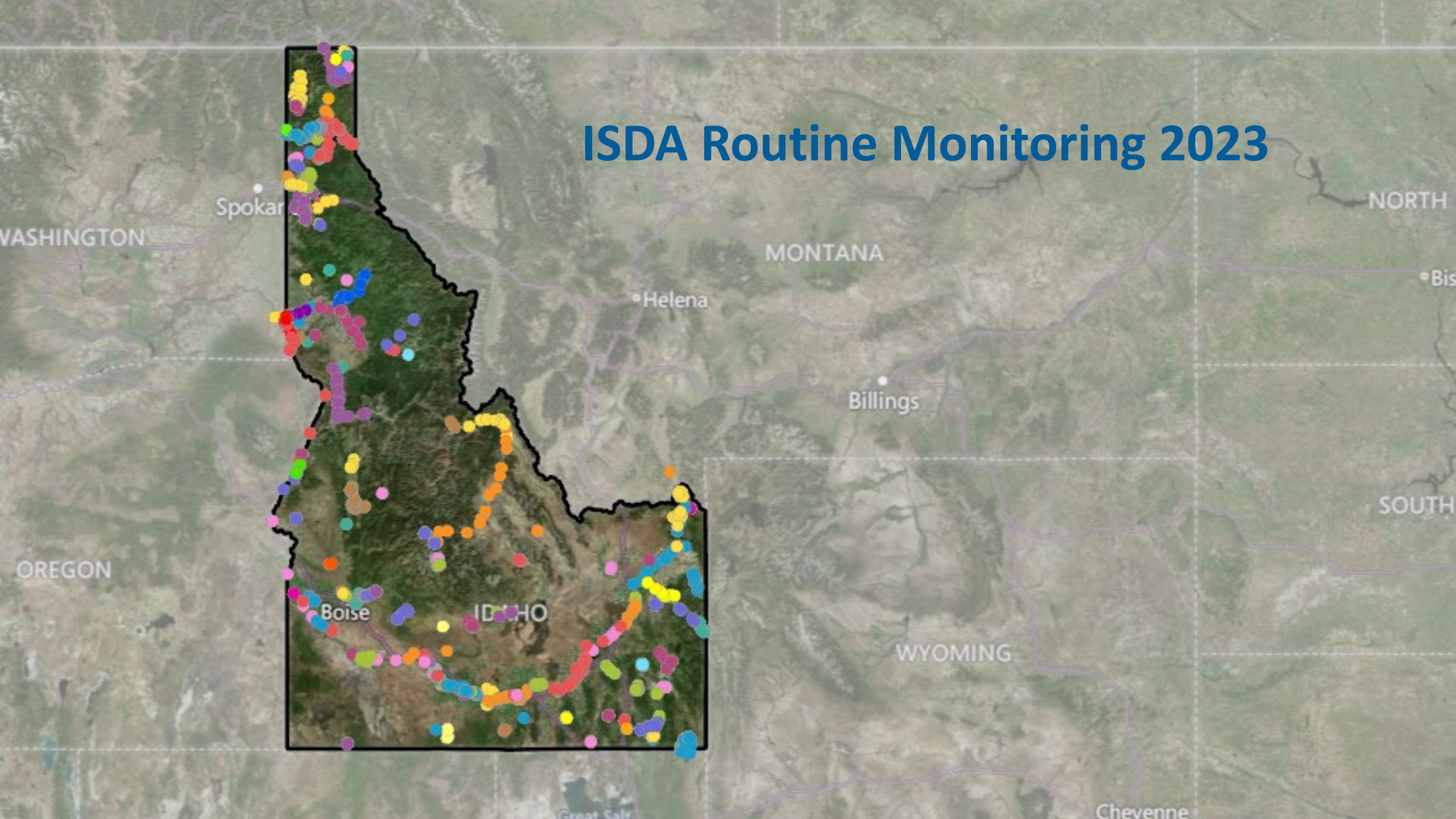
Snake River Quagga Mussel Response

ISDA Routine Monitoring 2023



ISDA's Rapid Response Plan

- Notify impacted entities.
- Implement containment measures.
- Conduct delimiting surveys.
- Explore treatment options.

Notify Impacted Entities

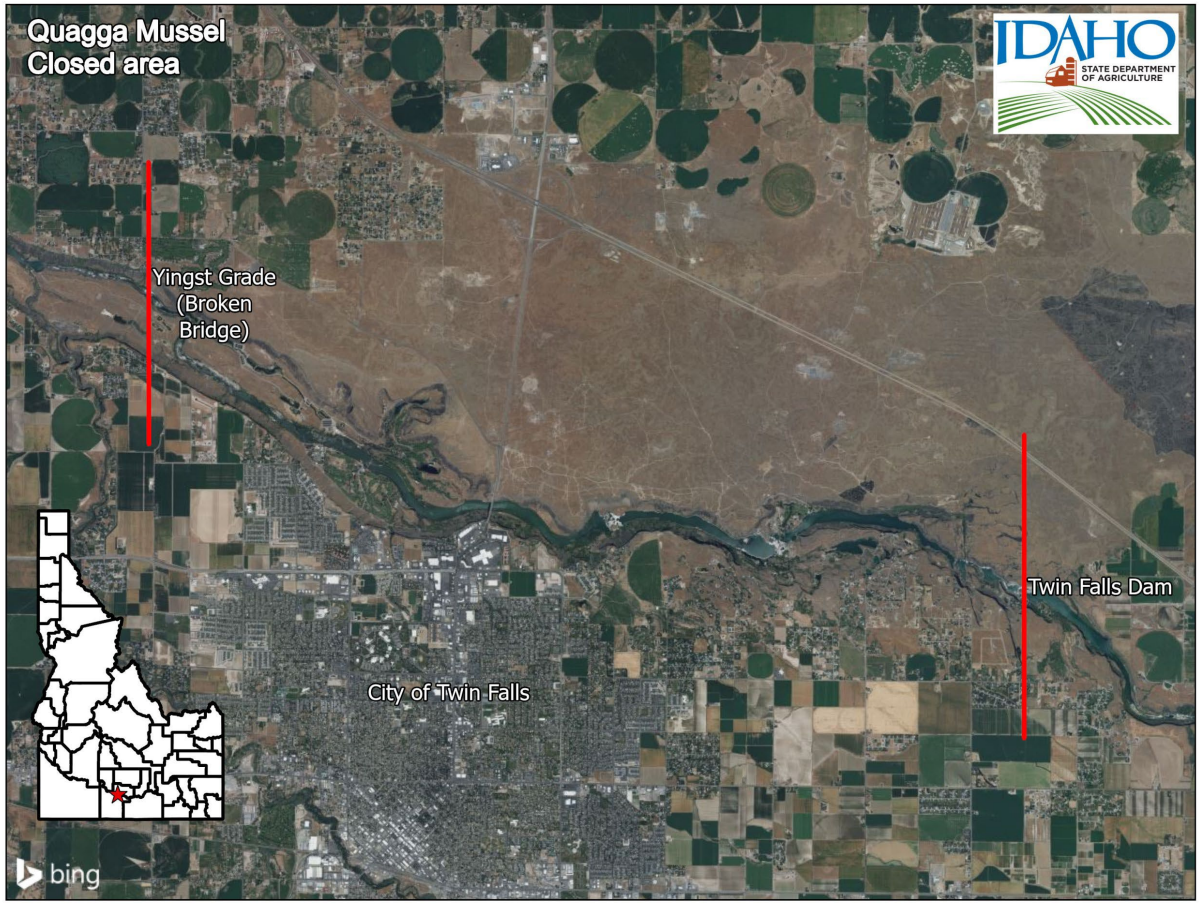
- Establish communications team
- Media releases
- Create webpage
- IS Hotline

MEDIA ADVISORY – Press Conference Tuesday September 19, 2023 at 1:00 p.m.

Governor Brad Little and Idaho State Department of Agriculture Director Chanel Tewalt will be addressing the confirmed presence of quagga mussel veligers in the Centennial Waterfront Park area of the Snake River near Twin Falls. The press conference will provide more details on ISDA's rapid response plan to the aquatic invasive species.

Implement Containment Measures

- Waterbody closures
- Signage
- Mandatory decontamination for exiting watercraft
- Public outreach for watercraft recently visiting Mid-Snake area in previous 30 days

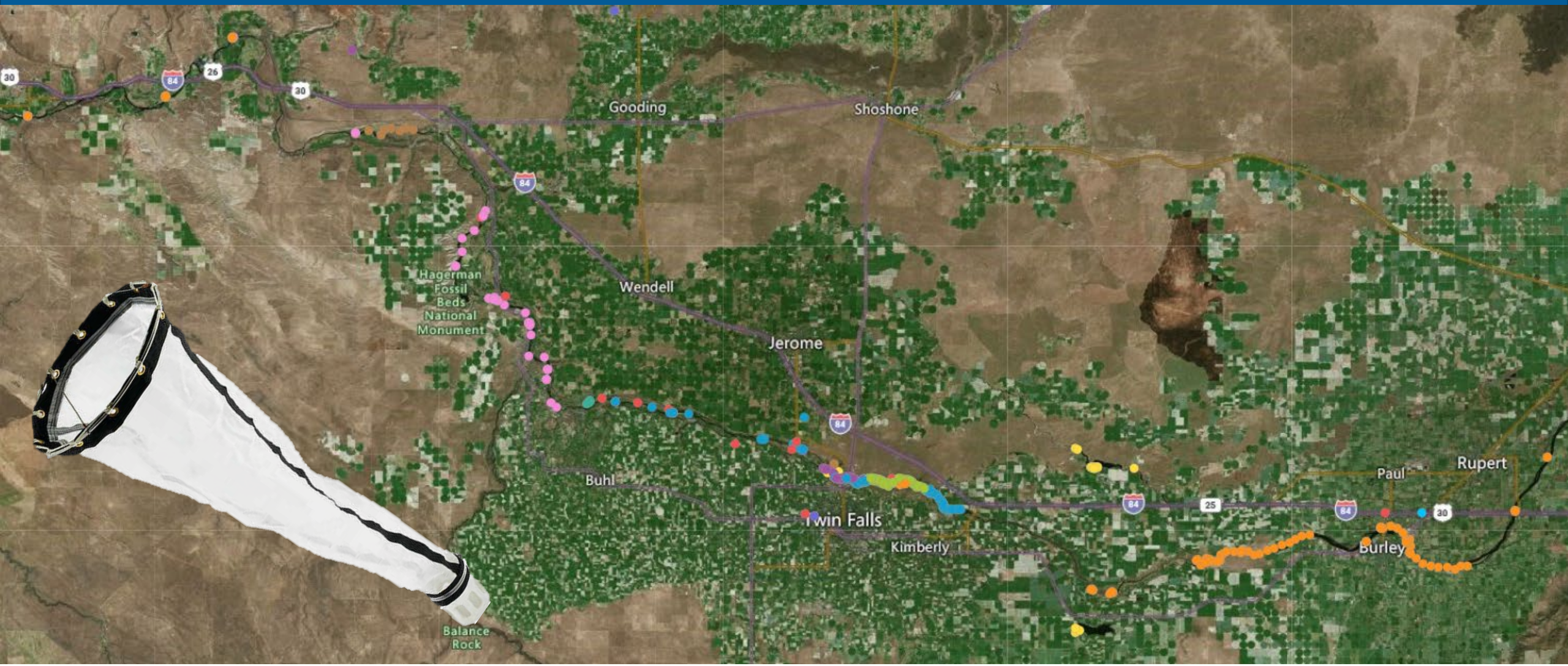


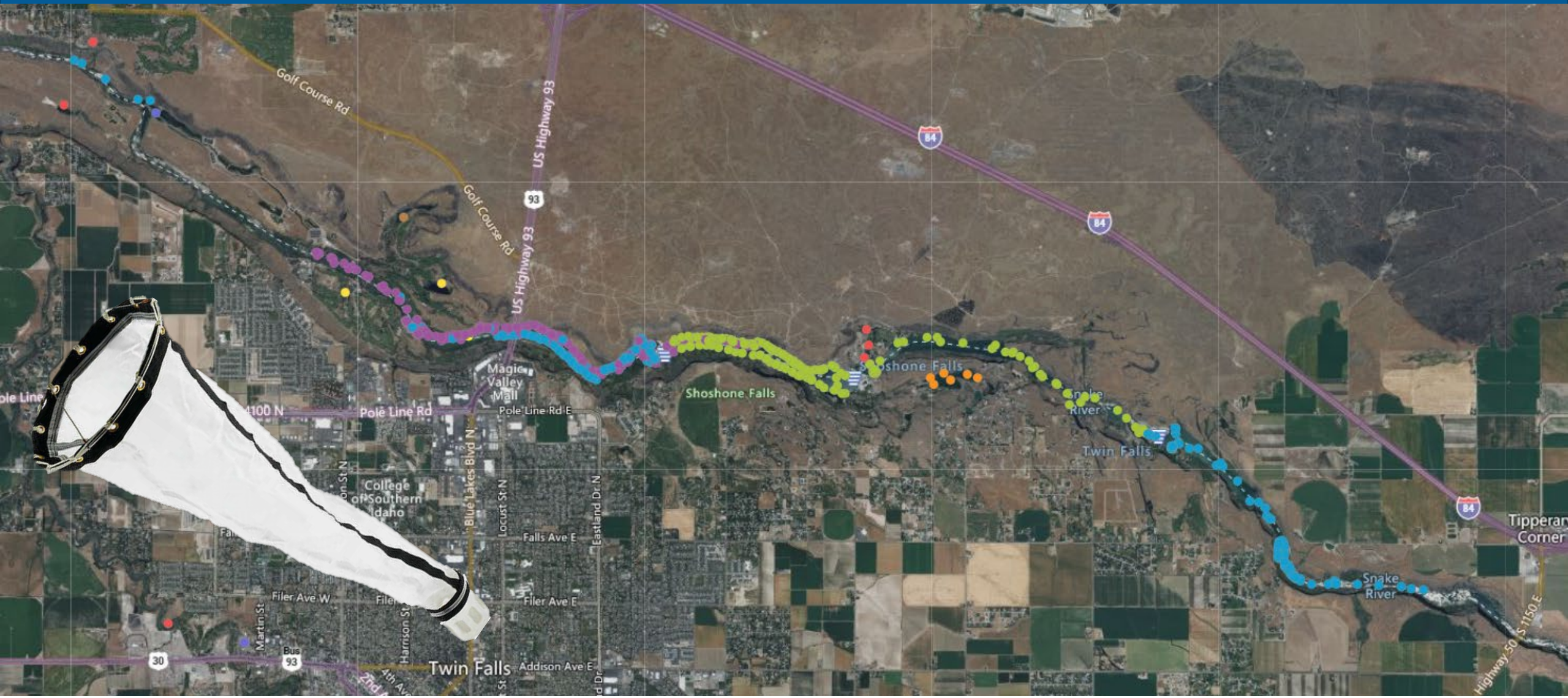
COVE 14.5
TRIBE 13.5

WATER
INSPECTO
CLEAN-DRAIN-DRY

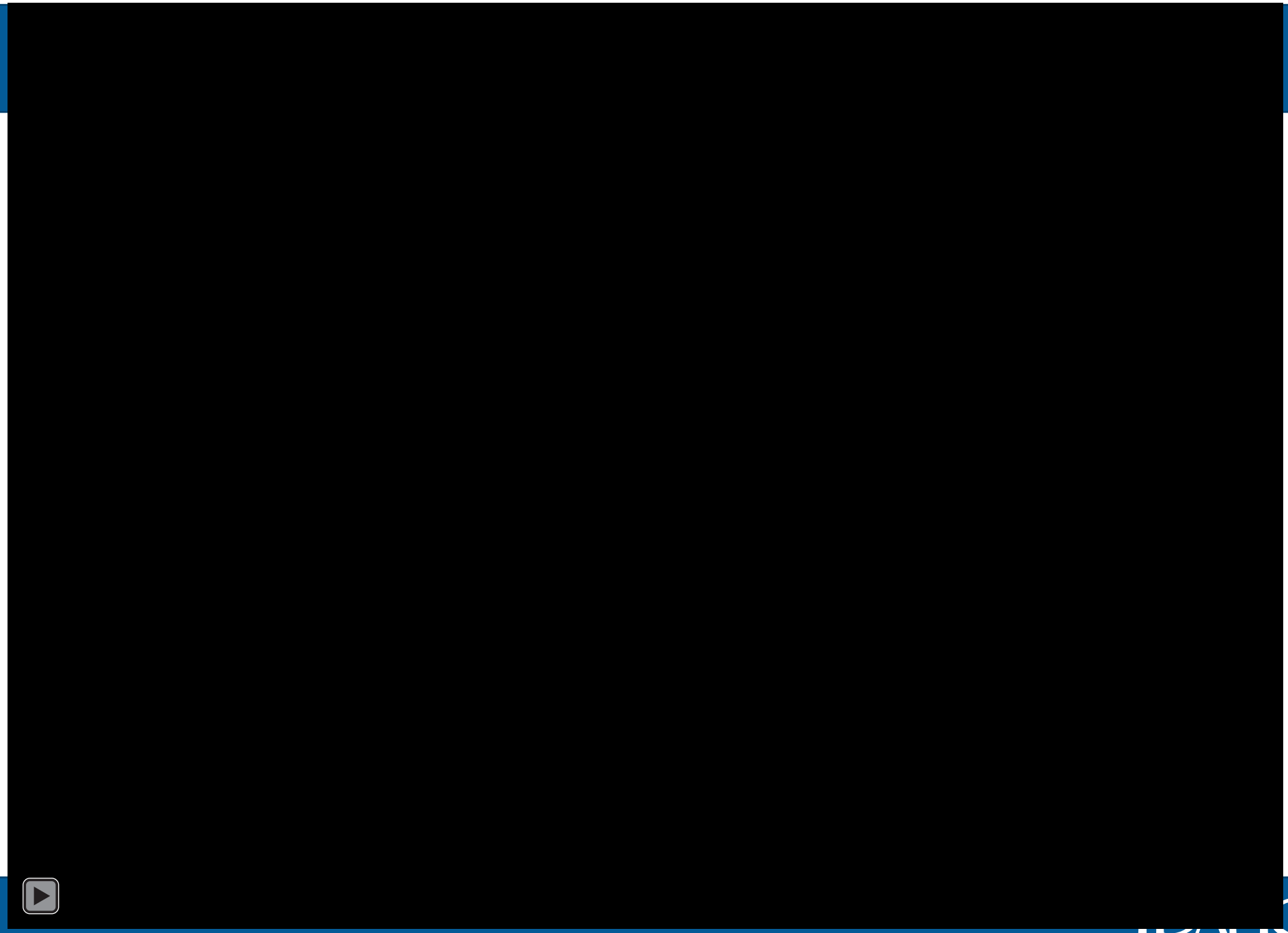
Wooldridge

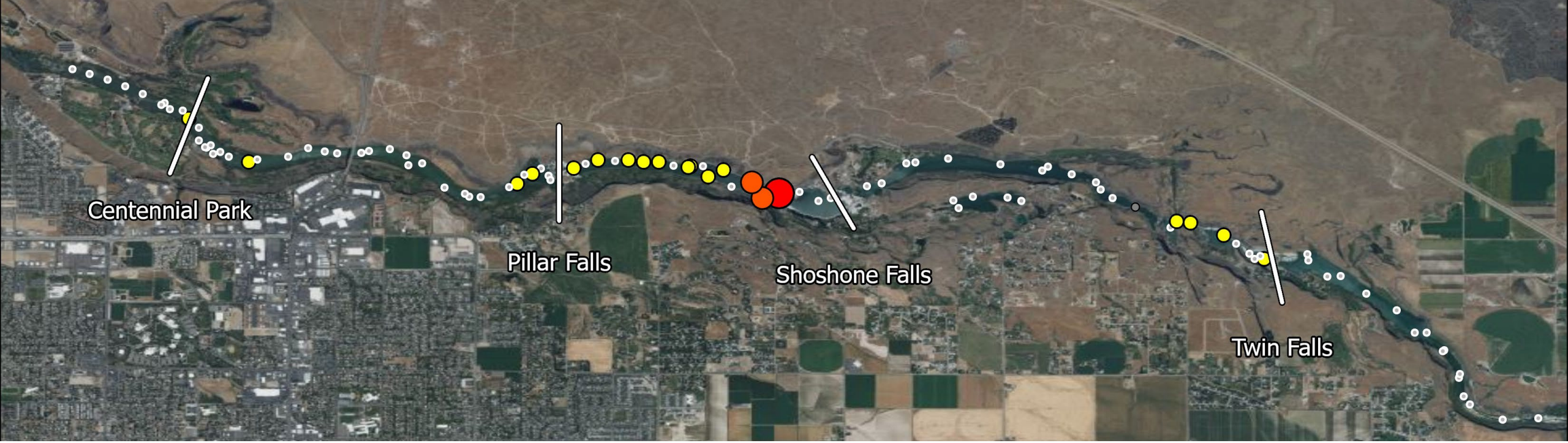
ID 4096 AX
SURF
SUPER AIR NAUTIQUE
NAUTIQUE


Gooding
Shoshone
Hagerman Fossil Beds National Monument
Wendell
Jerome
Buhl
Twin Falls
Kimberly
Paul
Rupert
Burley
Balance Rock


Golf Course Rd
US Highway 93
93
84
Magic Valley Mall
Pole Line Rd
Pole Line Rd E
Shoshone Falls
Twin Falls
College of Southern Idaho
Blue Lakes Blvd N
Locust St N
Falls Ave E
Eastland Dr N
Filer Ave W
Filer Ave E
Martin St
Harrison St
Addison Ave E
Bus 93
30
Snake River
Tipperary Corner
Highway 50
S 1150 E

IDAHO
STATE DEPARTMENT
OF AGRICULTURE
Quagga Mussel Veliger presence
September 27, 2023
Centennial Park
Pillar Falls
Shoshone Falls
Twin Falls
Legend
Number of Veligers

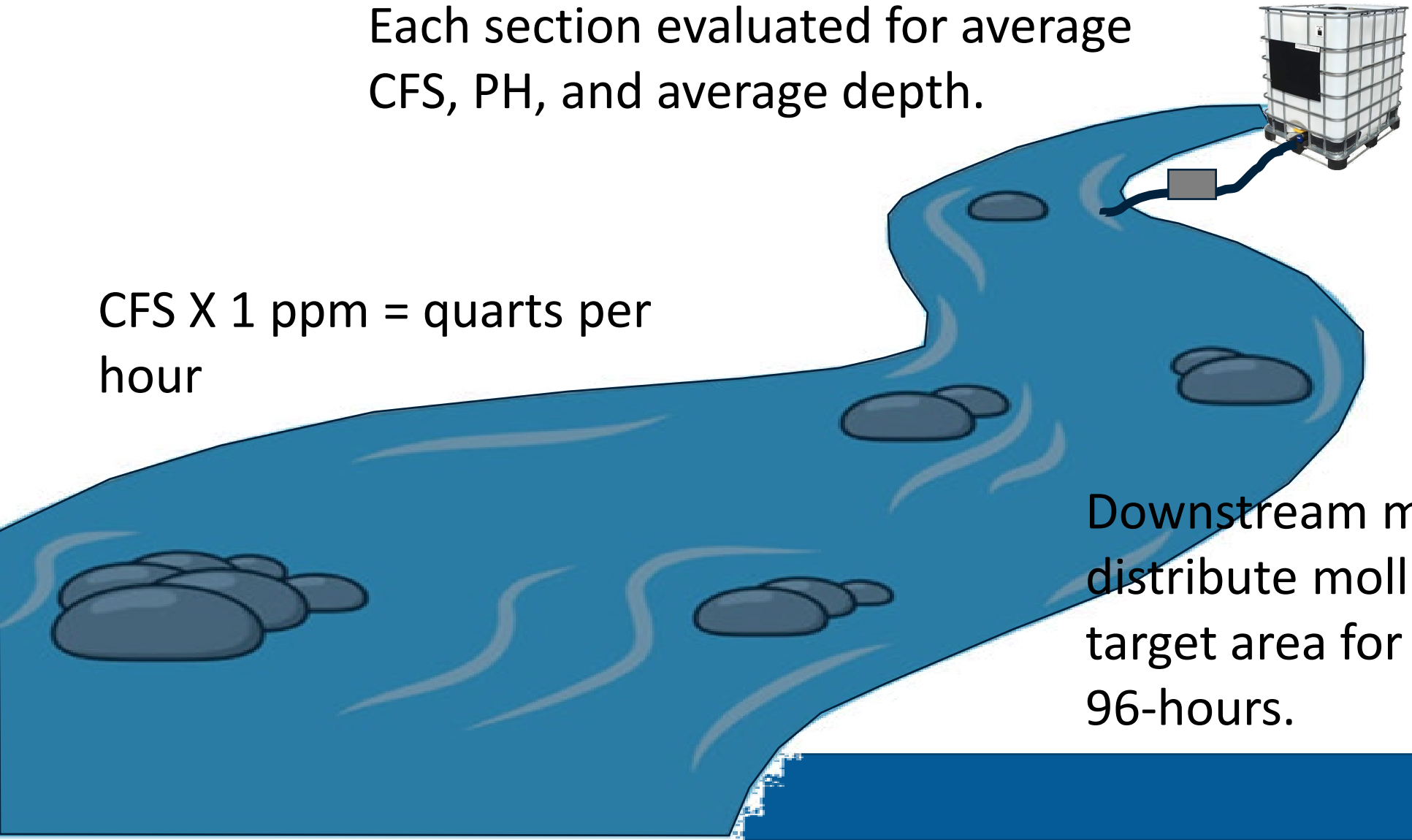



Centennial Park
Pillar Falls
Shoshone Falls
Twin Falls

Pillar to
Centenial
Shoshone
to Pillar
Twin
Falls Pool

Treatment Plan

Each section evaluated for average CFS, PH, and average depth.



Metered gravity boxes placed at key mix points to deliver molluscicide to the Snake River.

CFS X 1 ppm = quarts per hour

Downstream movement to distribute molluscicide throughout target area for the full duration of 96-hours.

PLAN Steps

Pre-Treatment Survey

Treatment Logistics

Treatment Notifications

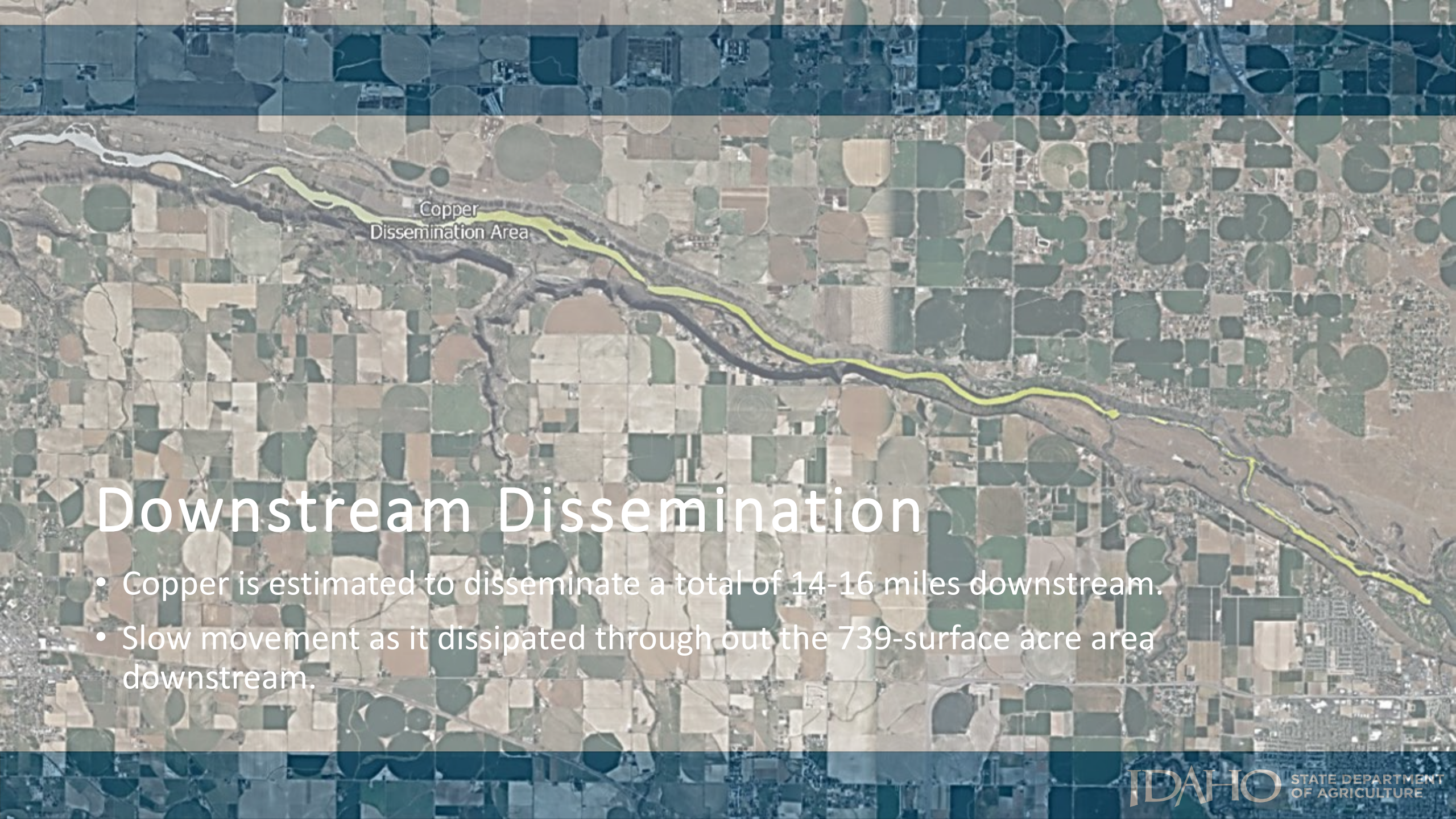
96-hour Treatment

Pre-Treatment Survey

- Targeting 300 CFS in working with impoundment partners.
  - Site specific CFS was collected below the Pillar Falls area.
- Checked downstream dissipation area for possible points of exchange with aquaculture facilities and/or Irrigation and or Stock watering.
- PH and Copper samples were collected before treatments to establish a baseline.

Pre-surveying for points of concern

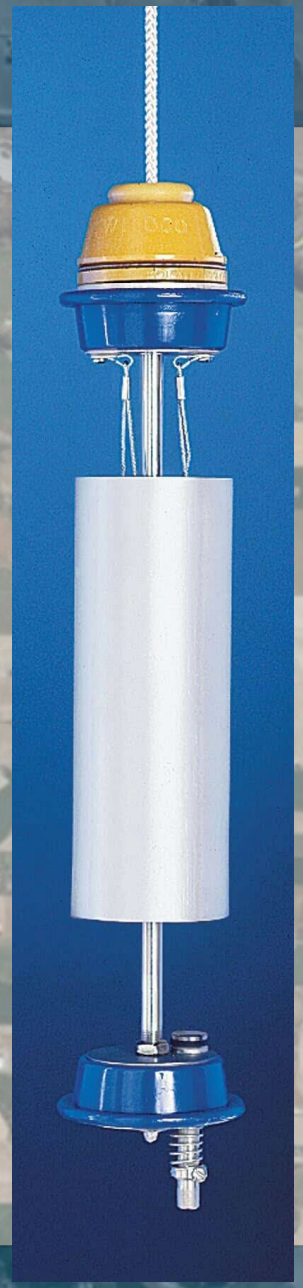
- Livestock access points.
- Direct water exchange at downstream aquaculture sites, stock water, or irrigation intakes.



Downstream Dissemination

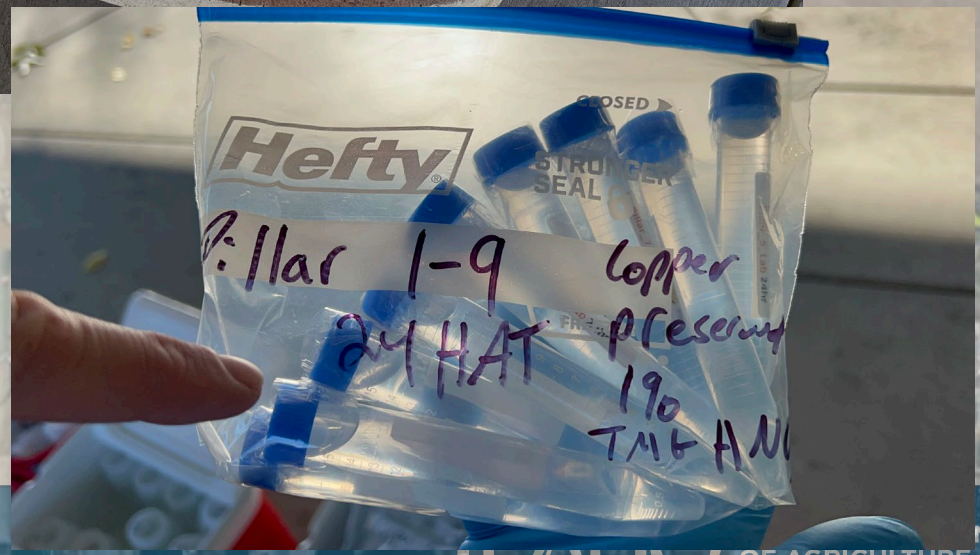
- Copper is estimated to disseminate a total of 14-16 miles downstream.
- Slow movement as it dissipated through out the 739-surface acre area downstream.

IDAHO STATE DEPARTMENT OF AGRICULTURE



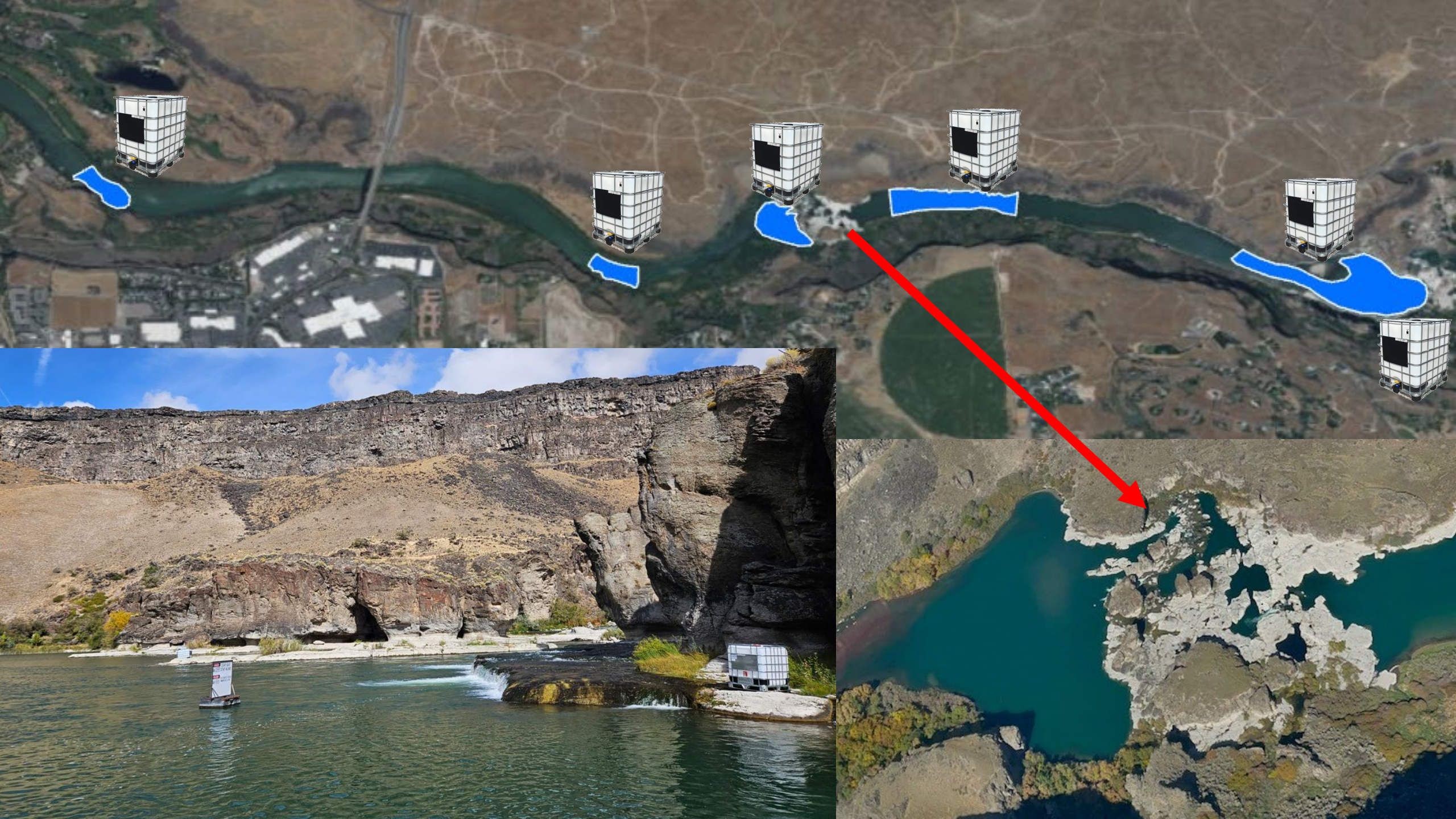
HACH
17 COD HR
DR 900
908
mg/L
COD
Options
Zero
Read
EXTECH
4.33
23.6
pH
ExStik

PROCESSED SAMPLES
SNAKE RIVER
10-12-23


Hefty
CLOSED
STRONGER SEAL
Pillar 1-9
24 HAT
Copper
Preserv
190
TMB AN

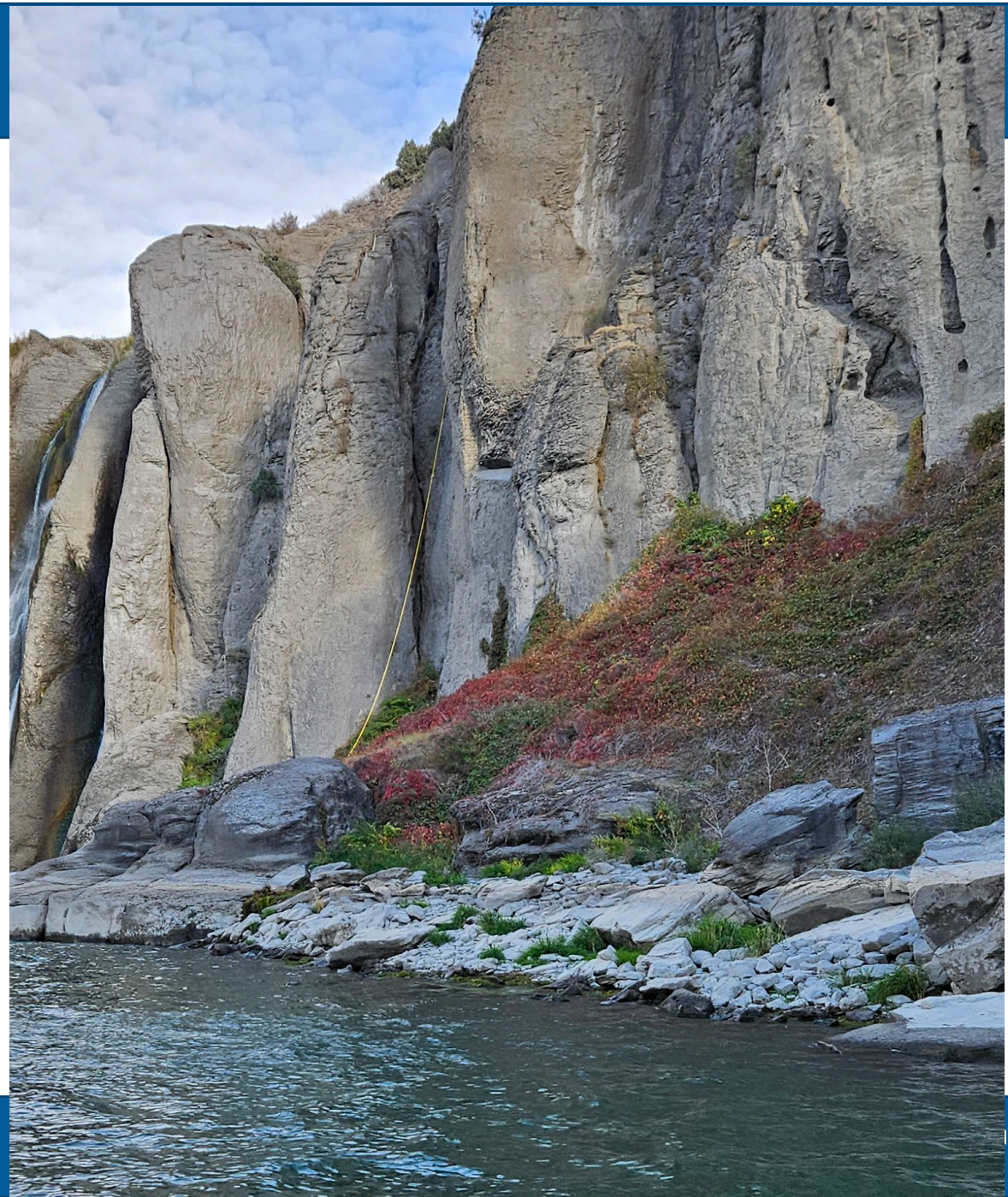
MERCURY
ID 2188ZB

IDAHO



N573RF

SCHUTZ



ASHLEY
11637390
TOYOTA
United Rentals
800-UR-RENTS
Allmand
United Rentals
NIGHT-LITE

SCHUTZ

FOR SALE
3.3 RARE ACRES WITH EXCEPTIONAL CANYON VIEWS OF SHOSHONE FALLS
1760
8
1760
8
IDEM

1760
8

JOBOX

STATE DEPARTMENT
OF AGRICULTURE

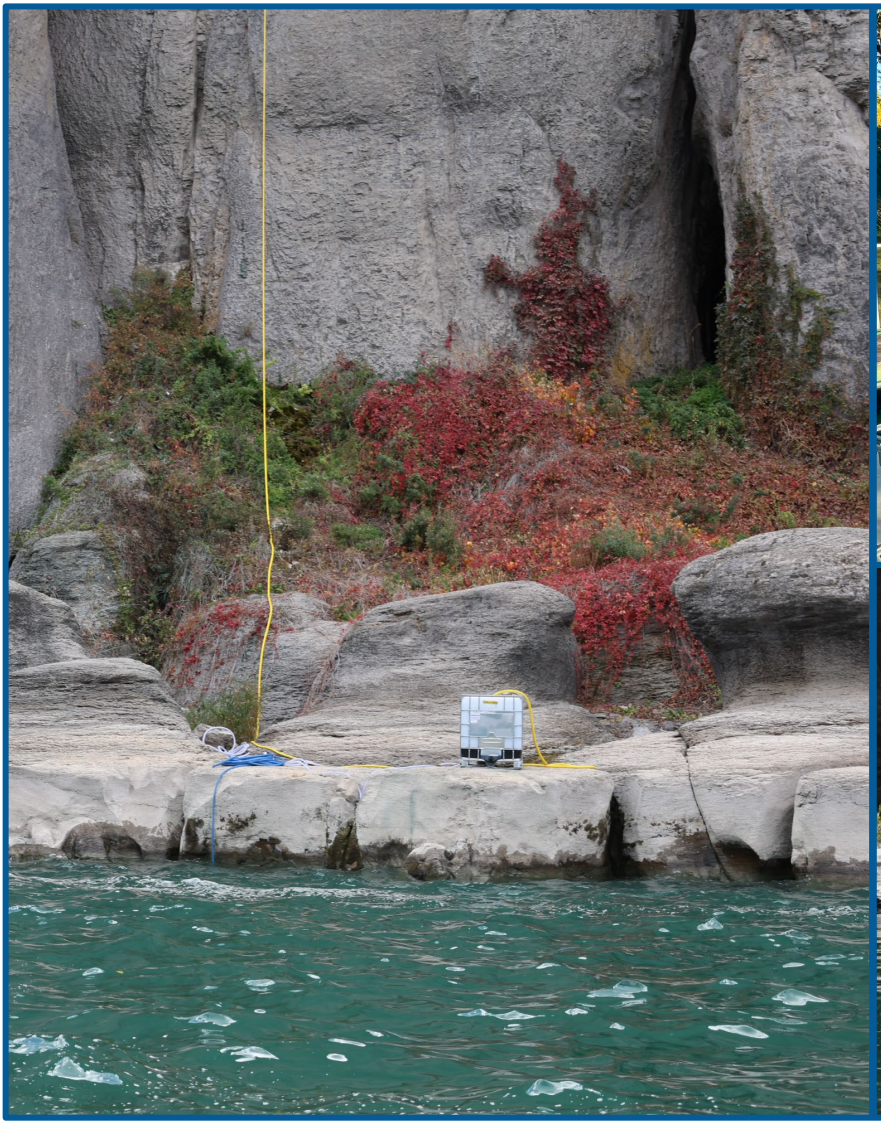
Treatment Notifications

- Worker Protection Standard bilingual warning signage
- Message boards
- Paid advertisements (radio, Facebook, Instagram and Nextdoor)
- Coordination with HOAs with private docks
- Door-knocking to stakeholders with water-front access
- Public Treatment Town Hall Briefing

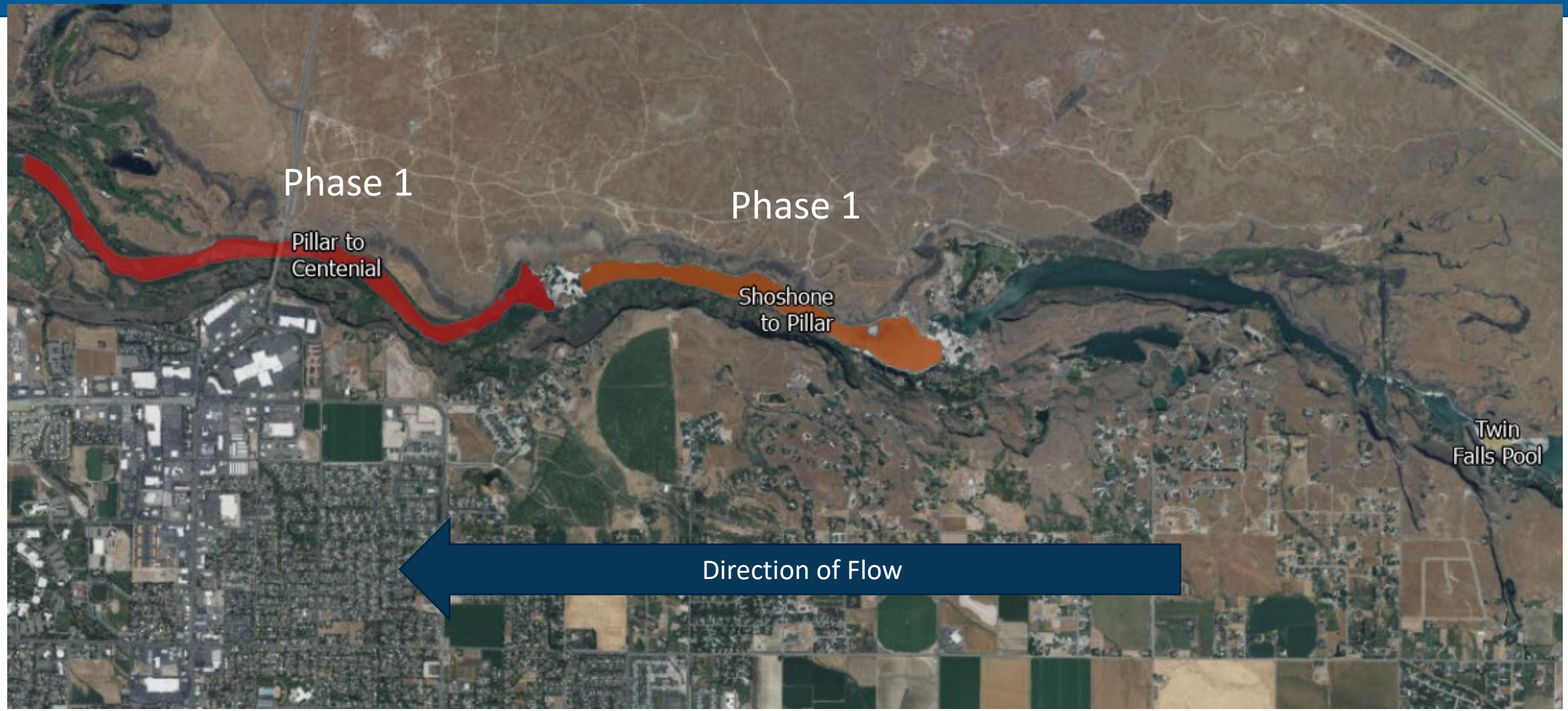
96-Hour Treatment

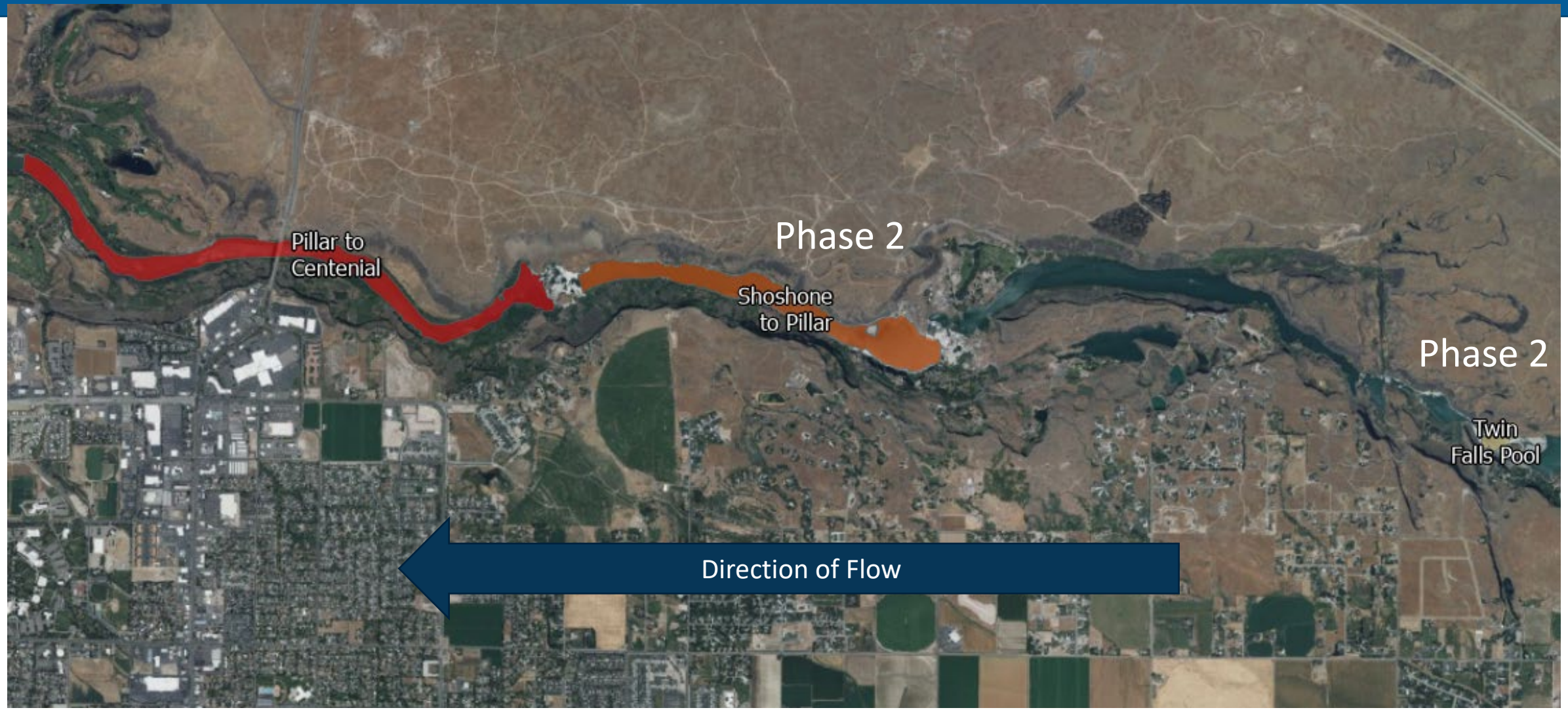
Quagga Mussel Treatment Schedule

Phase 1	Phase 2
October 3, 2023, treatment will start on Shoshone Falls to Pillar Falls and Pillar Falls to Centennial Park area.	October 9, 2023, treatment will start on Shoshone to Pillar Falls and Twin Falls deep pool area.
96-hour, 1 ppm treatment will continue until Saturday October 7, 2023.	96-hour, 1 ppm treatment will continue until Friday October 13, 2023.
Clean up of supplies/equipment on Centennial to Pillar Falls area will initiate at the close of the 96-hour treatment on **October 7, 2023**, and be completed by **October 8, 2024**.	Clean up of all supplies/equipment on Pillar Falls to Shoshone and Twin Falls deep pool area will initiate at the close of the 96-hour treatment on **October 13, 2023**, and be completed by **October 14, 2024**.



NO
WAKE ZONE

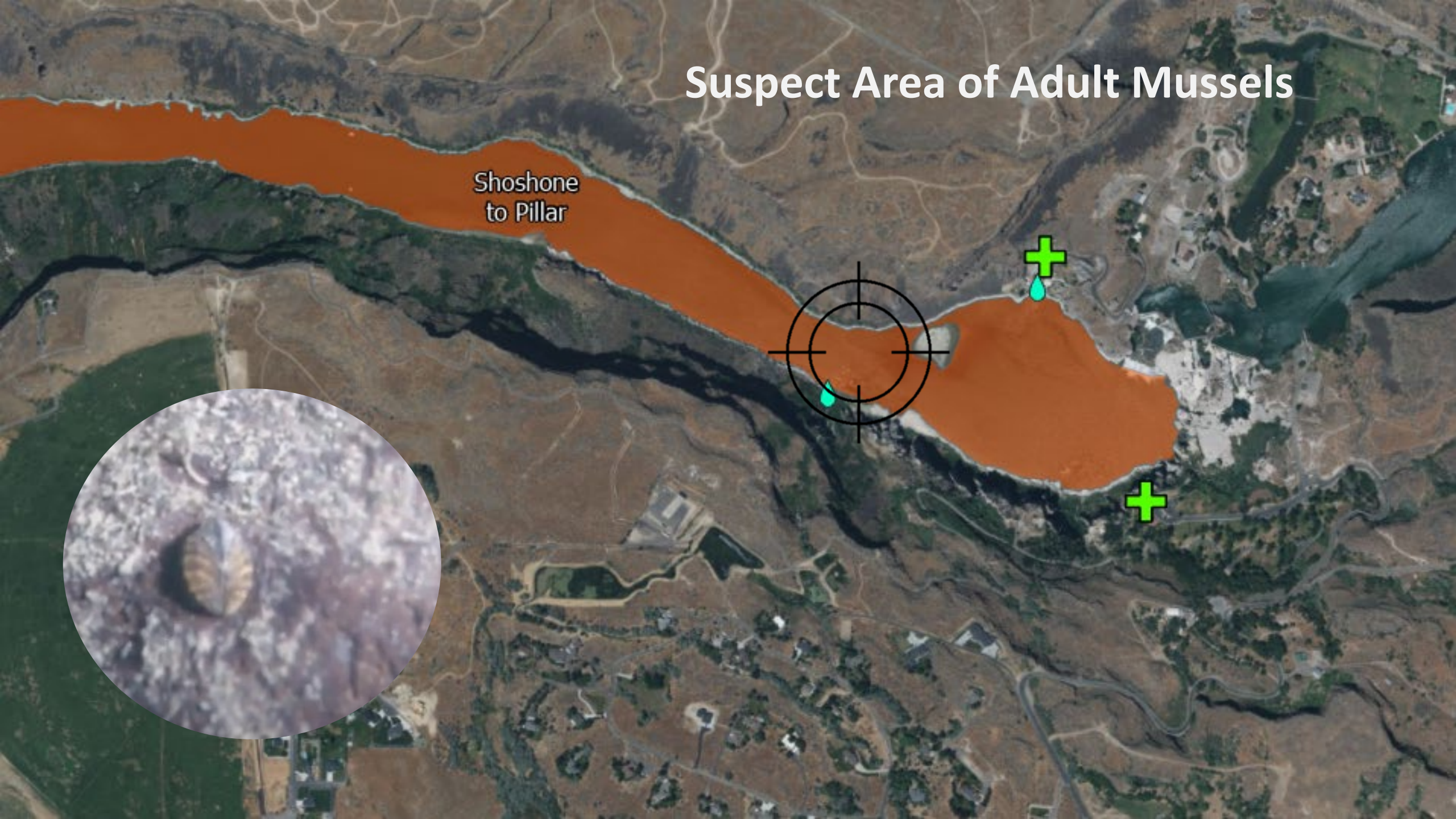

Phase 1
Pillar to
Centenial
Phase 1
Shoshone
to Pillar
Twin
Falls Pool
Direction of Flow


Pillar to
Centenial
Phase 2
Shoshone
to Pillar
Phase 2
Twin
Falls Pool
Direction of Flow

Shoshone to Pillar Falls

- 91.65 Surface Acres
- Staging sites
  - Shoshone Falls PowerHouse Intake
  - Shoshone Falls Park

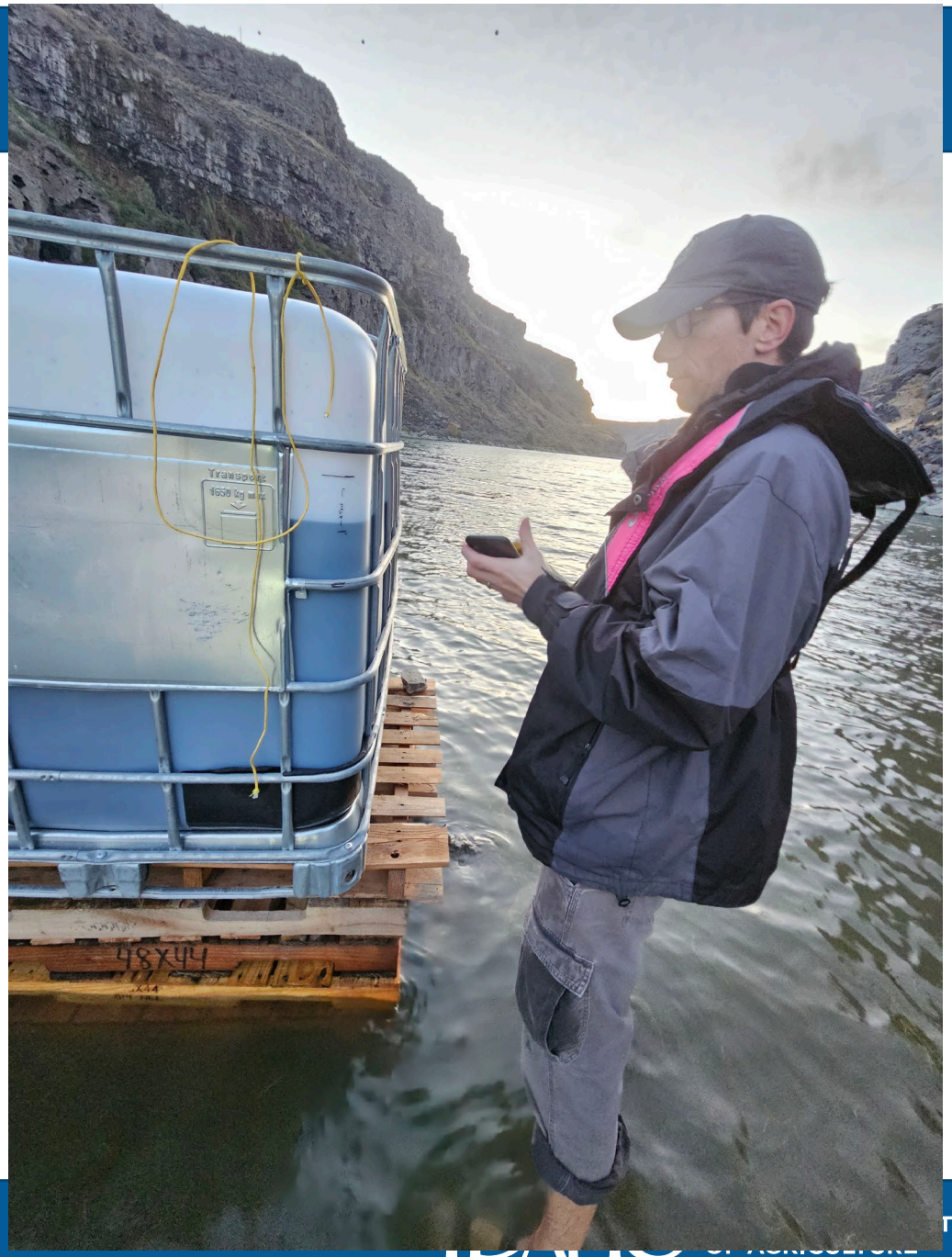
Suspect Area of Adult Mussels

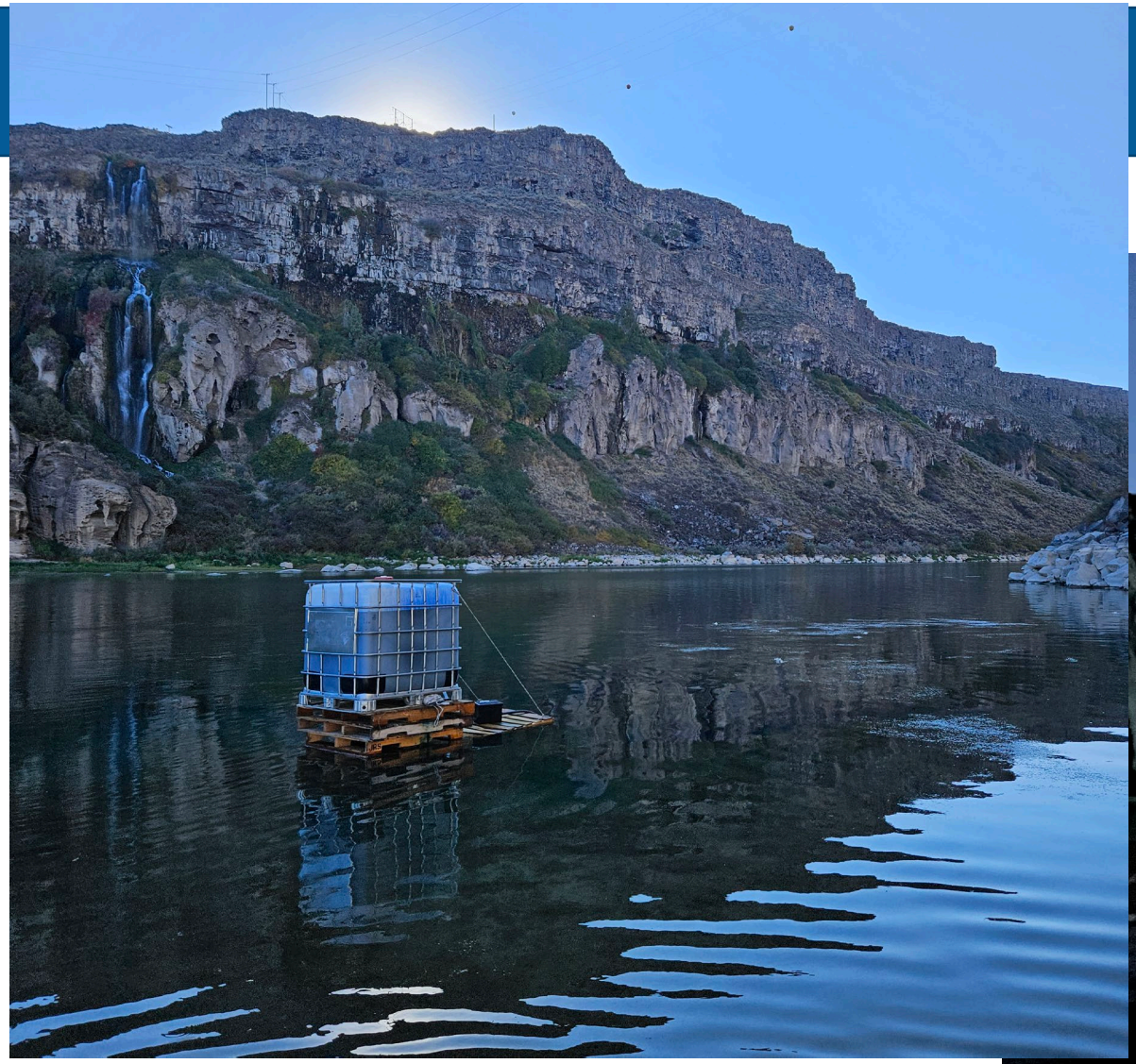


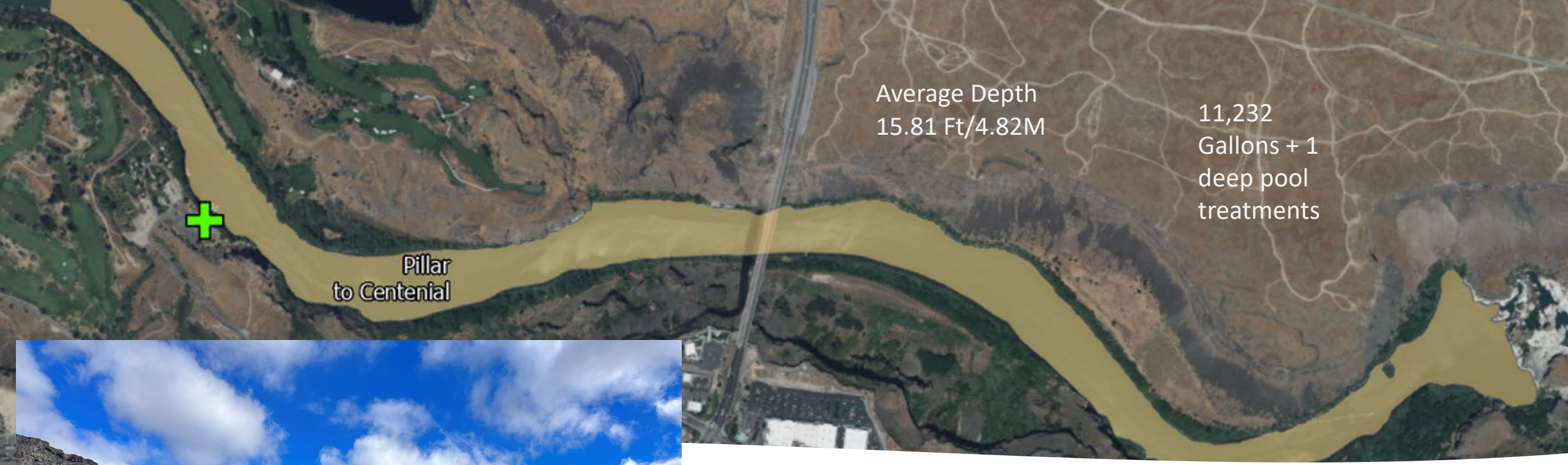
WARNING

SAVAGE RIVER TRAILERS

SCHÜTZ
CONTAINER SERVICES
1760
8
Natrix







Pillar Falls to Centennial

- 118.23 Surface Acres
- Staging sites
  - Centennial Park

8,352 Gallons
+ 1 deep pool
treatments

Average Depth
35.8 Ft/10.9M

Twin Falls
Pool

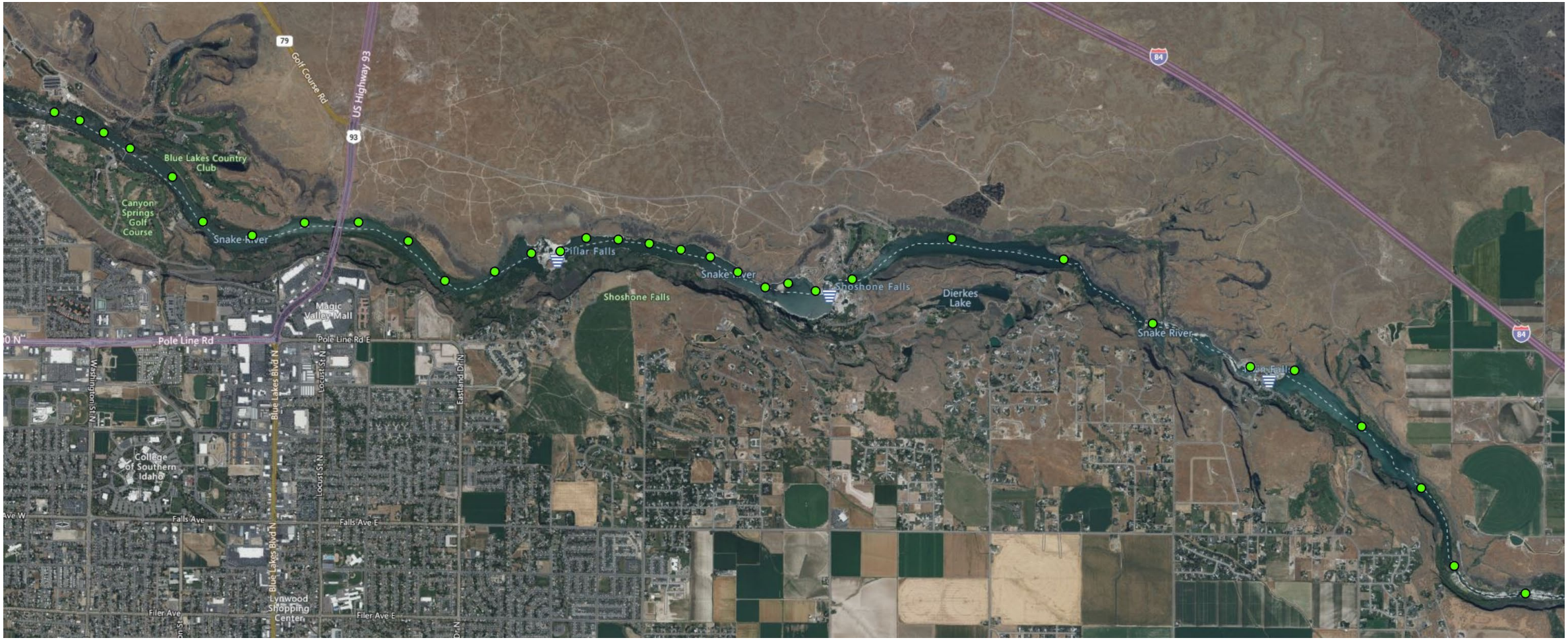
Twin Falls Deep Pool

- 3.78 Surface Acres
- Staging site at Twin Falls Power Plant

Post-Treatment Veliger Sampling

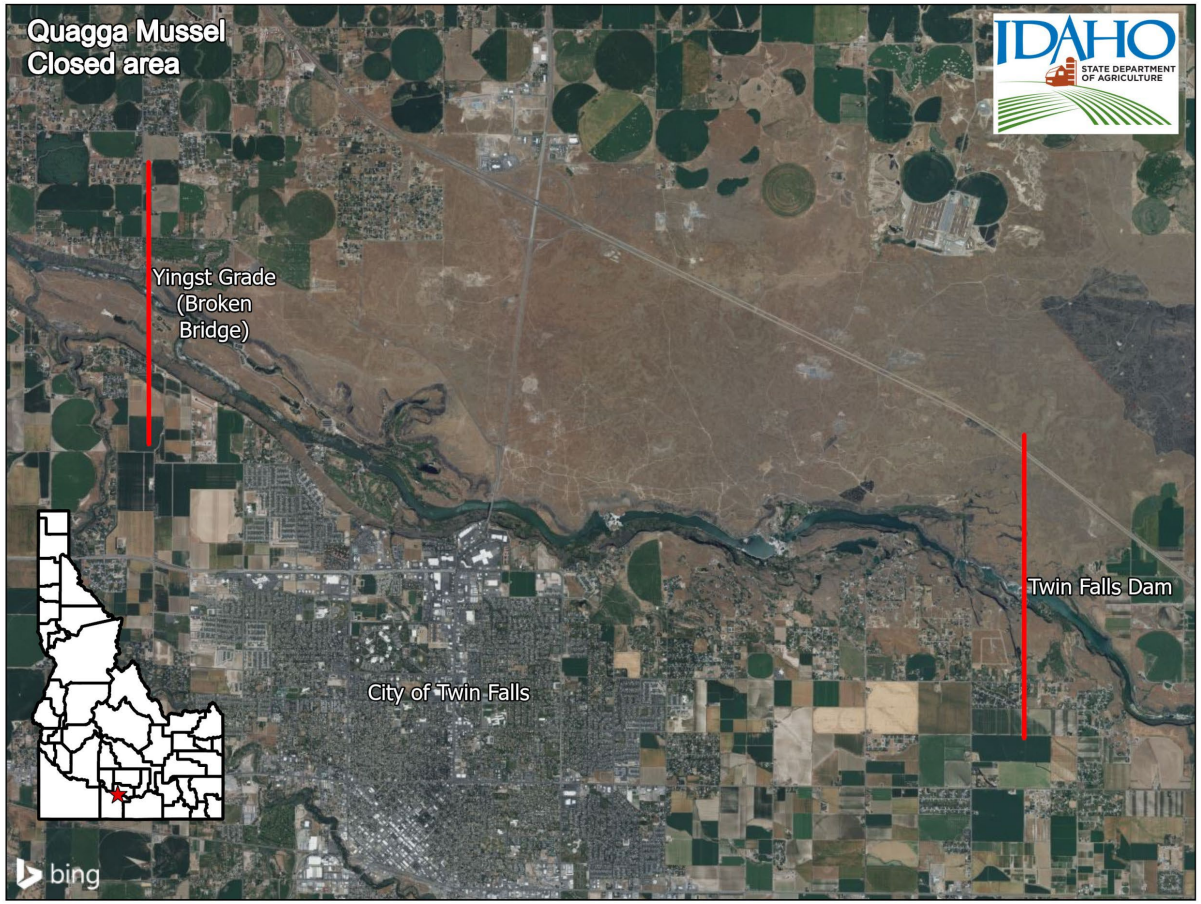
- Treatment did impact the adult mussel and sentinel species
- Preliminary sample results indicating that treatment has impacted veliger populations
- Veliger sampling until water gets below 10° C.

Post-Treatment Veliger Sampling



Future Efforts

- Waterbody closure lift TBD
- Increased signage
- Mandatory inspection and decontamination for exiting watercraft
- Increased monitoring upstream and downstream
- Increased outreach and awareness



IDAHO
FISH & GAME
IDAHO DEPARTMENT OF
WATER RESOURCES
IDAHO GOVERNOR'S OFFICE OF SPECIES CONSERVATION
GOVERNOR
BRAD LITTLE
IDAHO WATER
USERS ASSOCIATION
IDAHO DEPARTMENT OF
ENVIRONMENTAL QUALITY
IDAHO
POWER
An IDACORP Company
IDAHO
STATE DEPARTMENT
OF AGRICULTURE
IDAHO DEPARTMENT OF LANDS
STATE PARKS
IDAHO
& RECREATION
IDAHO • OREGON • ALASKA
PACIFIC STATES MARINE
FISHERIES COMMISSION
WASHINGTON • CALIFORNIA
IDAHO
TRANSPORTATION DEPARTMENT
IDAHO OFFICE OF EMERGENCY MANAGEMENT
Prevention
Protection
Mitigation
Response
Recovery
IDAHO'S HOMELAND SECURITY & EMERGENCY MANAGEMENT AGENCY
CITY OF
TWIN FALLS
PEOPLE SERVING PEOPLE
UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
NATIONAL SYSTEM OF PUBLIC LANDS
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
U.S.
FISH & WILDLIFE
SERVICE
DEPARTMENT OF THE INTERIOR
USGS
US Army Corps
of Engineers
BUREAU OF
RECLAMATION
SHERIFF
TWIN FALLS COUNTY
SHERIFF
IDAHO