

PREPARED BY:

Kimley»»Horn

Expect More. Experience Better.

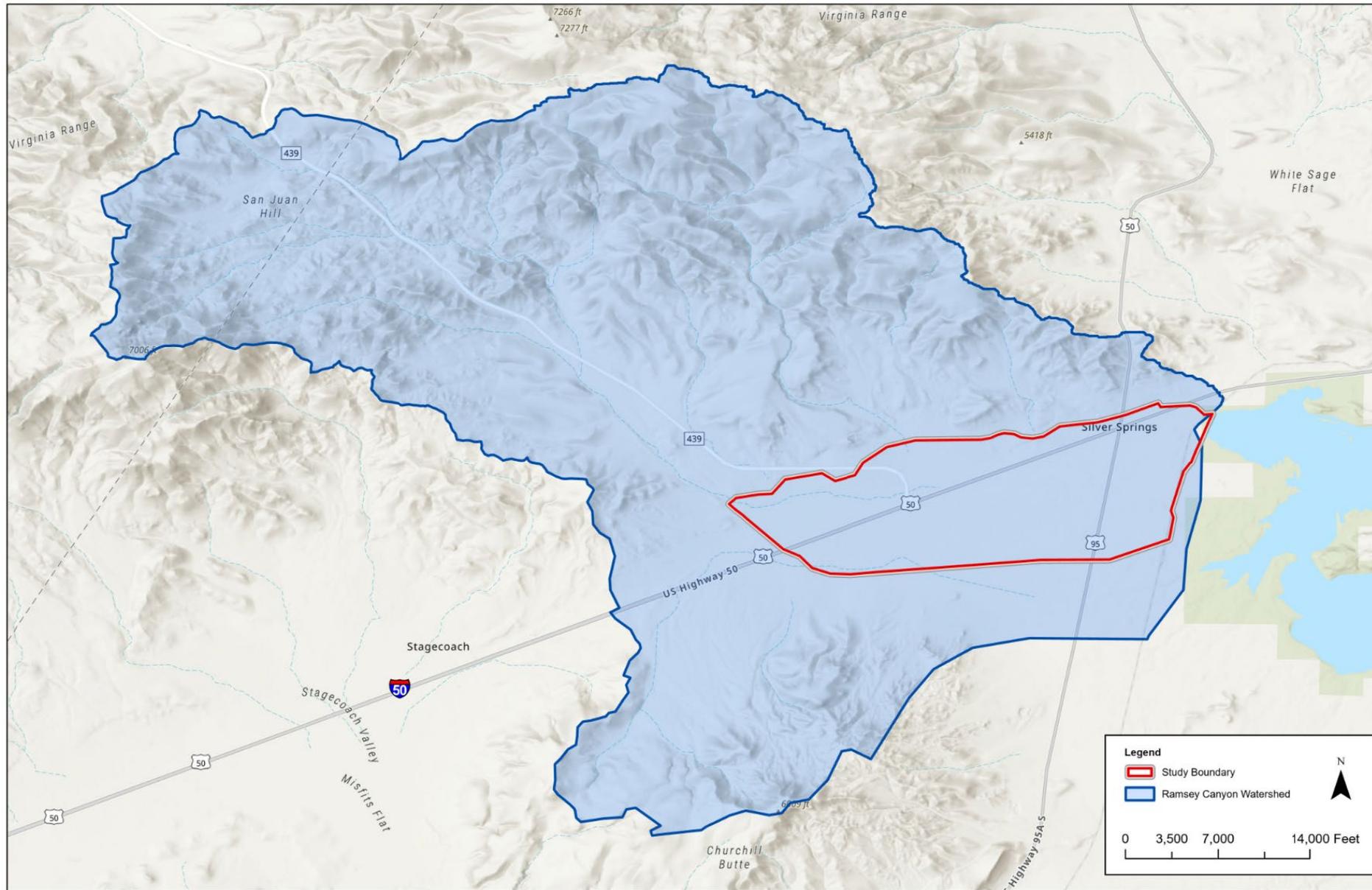
NORTH SILVER SPRINGS

Area Drainage Master Plan

August 2024

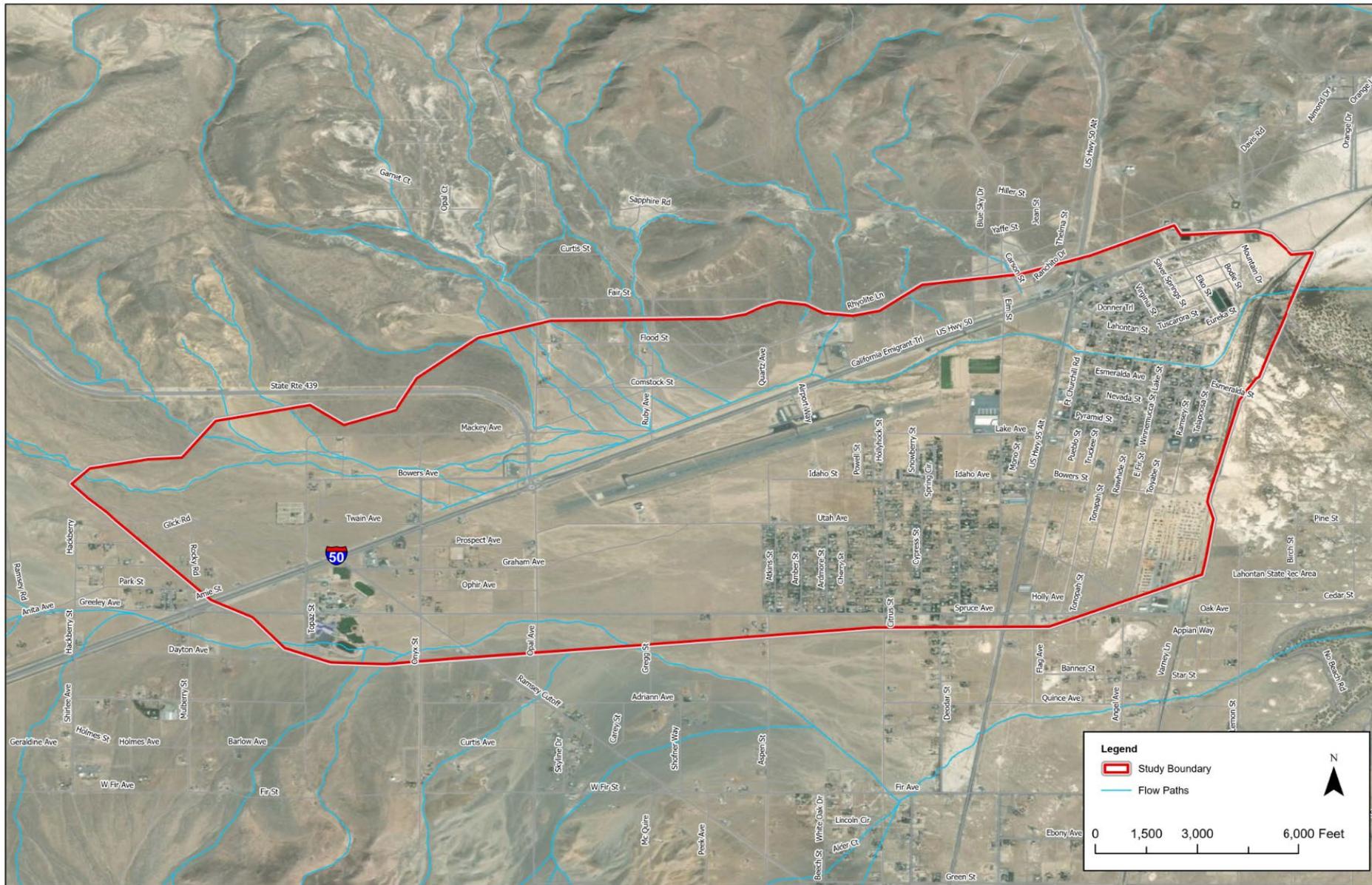
In Association With:





North Silver Springs Area Drainage Master Plan

Study Area Map



North Silver Springs Area Drainage Master Plan

Study Area Map

Project Purpose

- More accurately define flood hazards, including nuisance flooding, in the area
- Build on hydrologic and hydraulic studies
- Reduce flood hazards and increase community resiliency in the future

Project Goals

- Identify mitigation solutions for areas impacted by flood flows and erosion
- Formulate a plan to mitigate flooding with grant eligible projects
- Reduce flood hazards and flood insurance requirements for residents

Comprehensive Hydrology & Hydraulic Model

- **Grids**

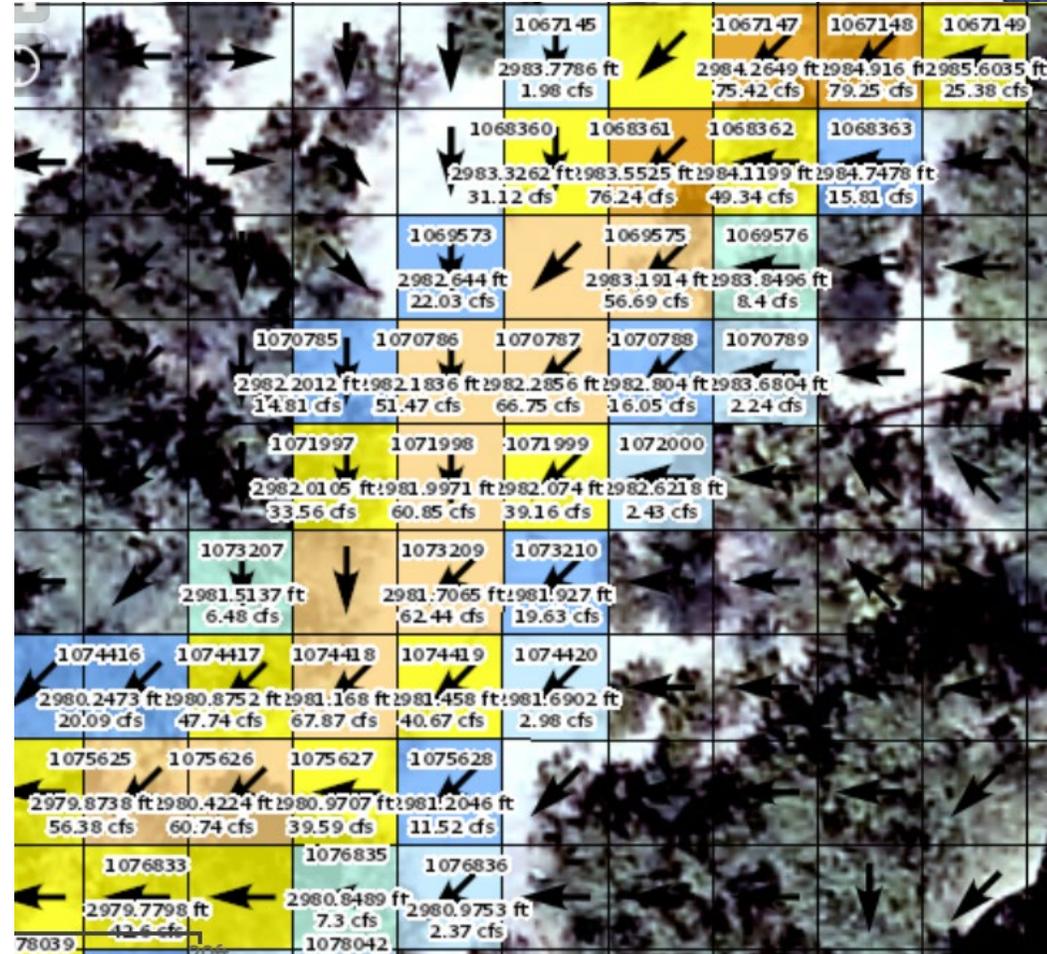
- Study area is divided into 60' x 60' grids
- Water depths
- Velocities
- Flows & flow direction

- **Models**

- Can be revised & updated
- Use for Design & Planning new development and infrastructure

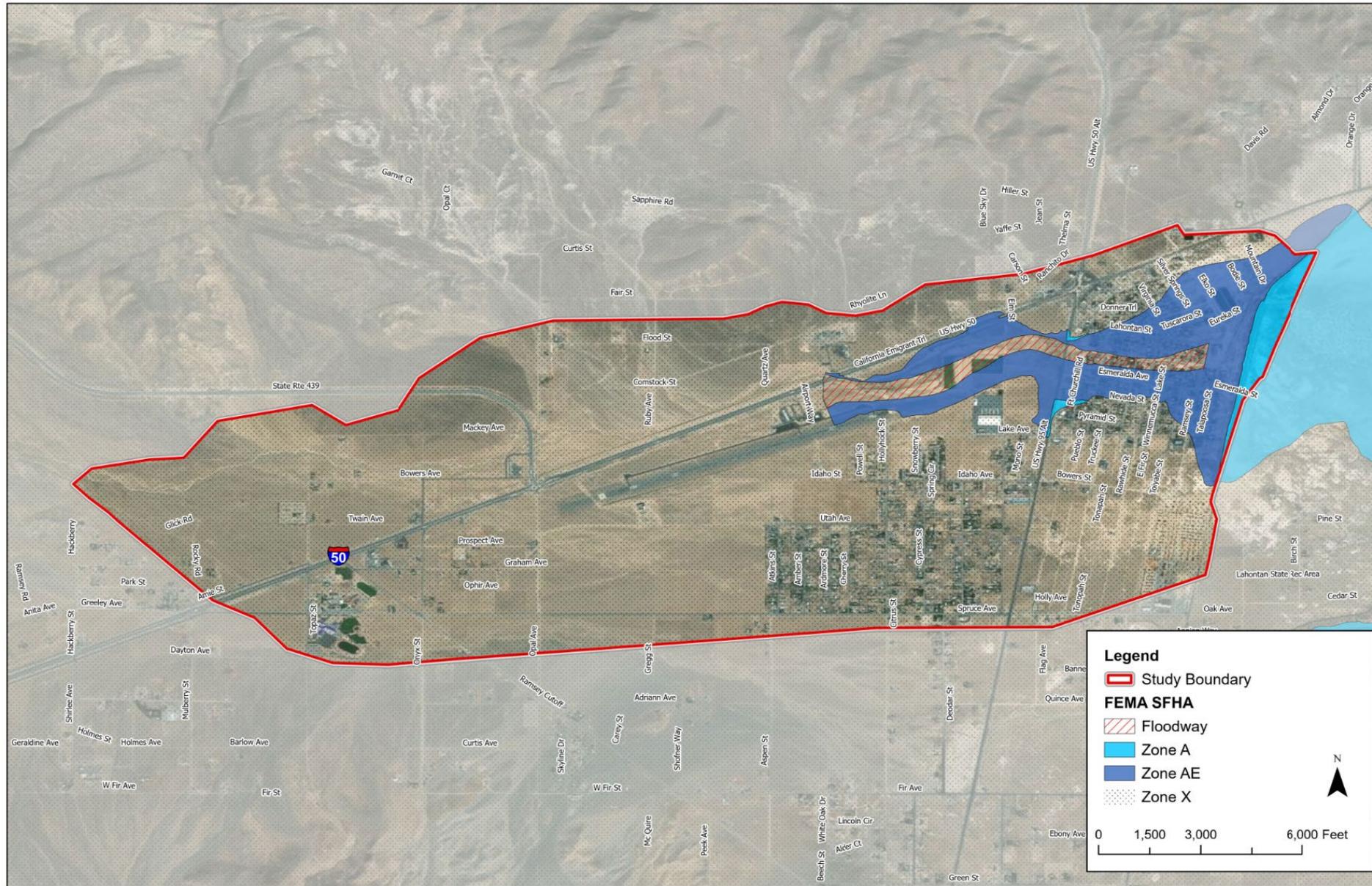
- **End Users**

- County
- Engineers
- Homeowners



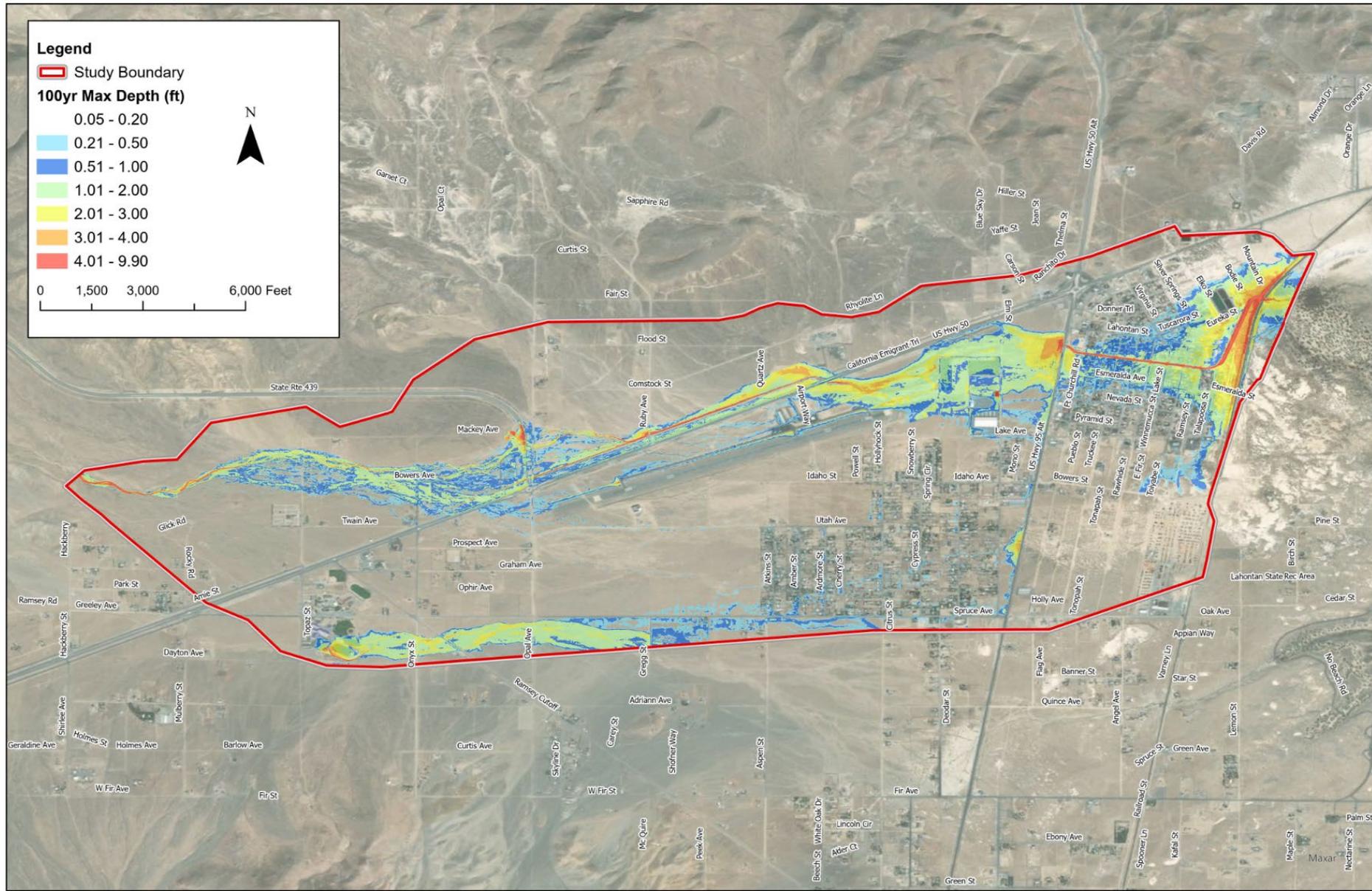
North Silver Springs

Area Drainage Master Plan



North Silver Springs Area Drainage Master Plan

FEMA Effective SFHA



North Silver Springs Area Drainage Master Plan

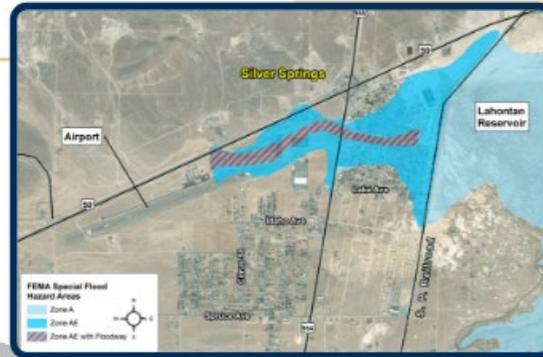
Flood Hazards Overview

Public & Stakeholder Meetings

COMMUNITY INFORMATION MEETING

NORTH SILVER SPRINGS AREA DRAINAGE MASTER PLAN

Residents and property owners are invited to learn about the North Silver Springs Area Drainage Master Plan and share your input and comments on drainage infrastructure with drainage experts at our in-person meeting!



IN-PERSON MEETING

TIME: Tuesday, May 23rd 2023 | 5:30-6:30pm
LOCATION: Silver Springs Community Center
ADDRESS: 2945 Fort Churchhill Road, Silver Springs, Nevada 89429

Come in person with input and comments.

VIRTUAL MEETING

Listen in to the virtual stakeholder meeting from 12-1pm

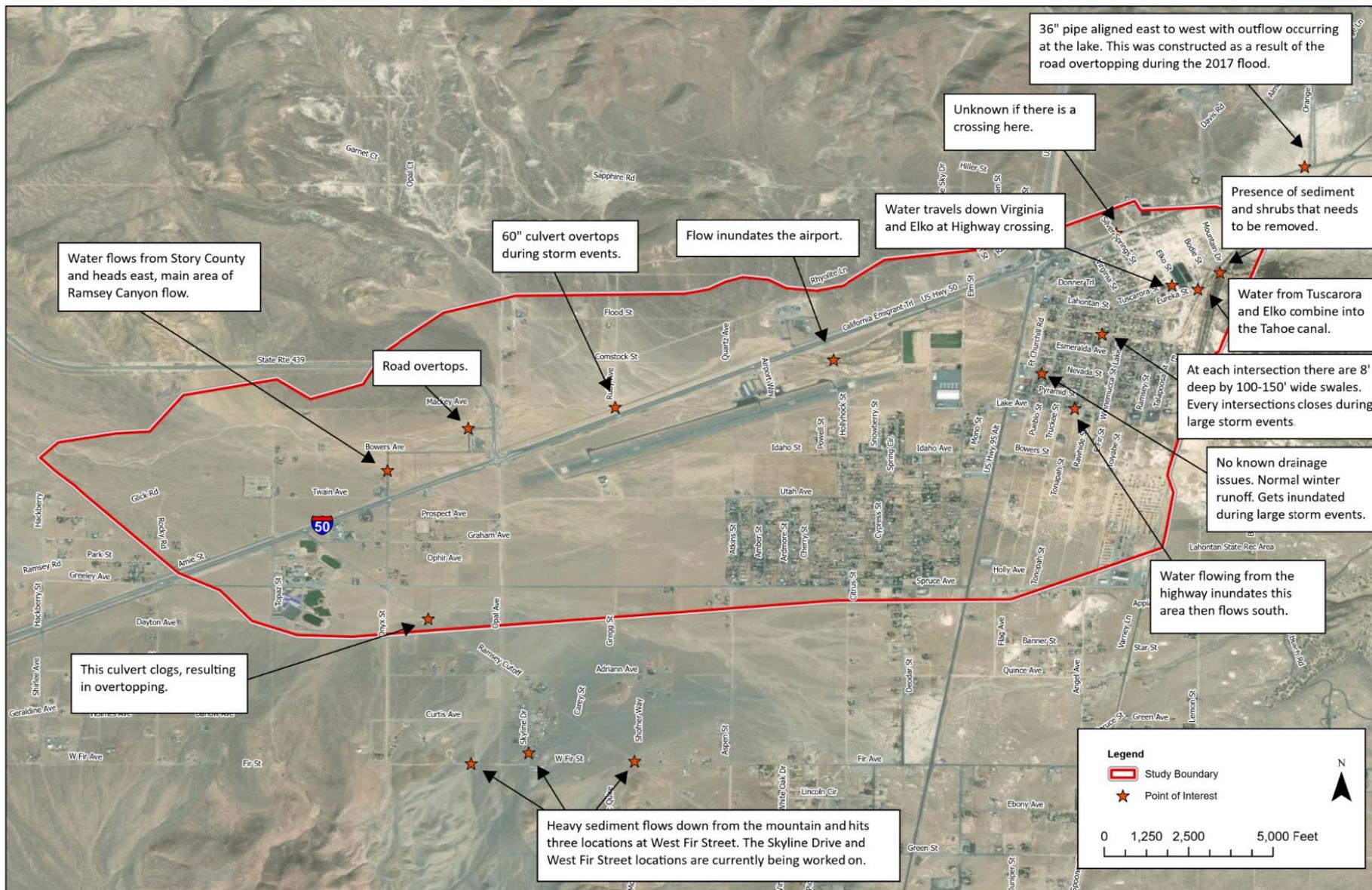


- May 23rd, 2023
- Existing conditions and initial results
- Collect public/stakeholder input
- 23 Virtual Attendees
- 9 In-Person Attendees

North Silver Springs
Area Drainage Master Plan

Public Meeting – Input

- **Marked-up maps with problem areas**
 - **Information limited to flooding along Spruce Ave**
- **Answered public questions**
- **Provided email and website to submit data and comments**
- **Information received housed in project report**



North Silver Springs Area Drainage Master Plan

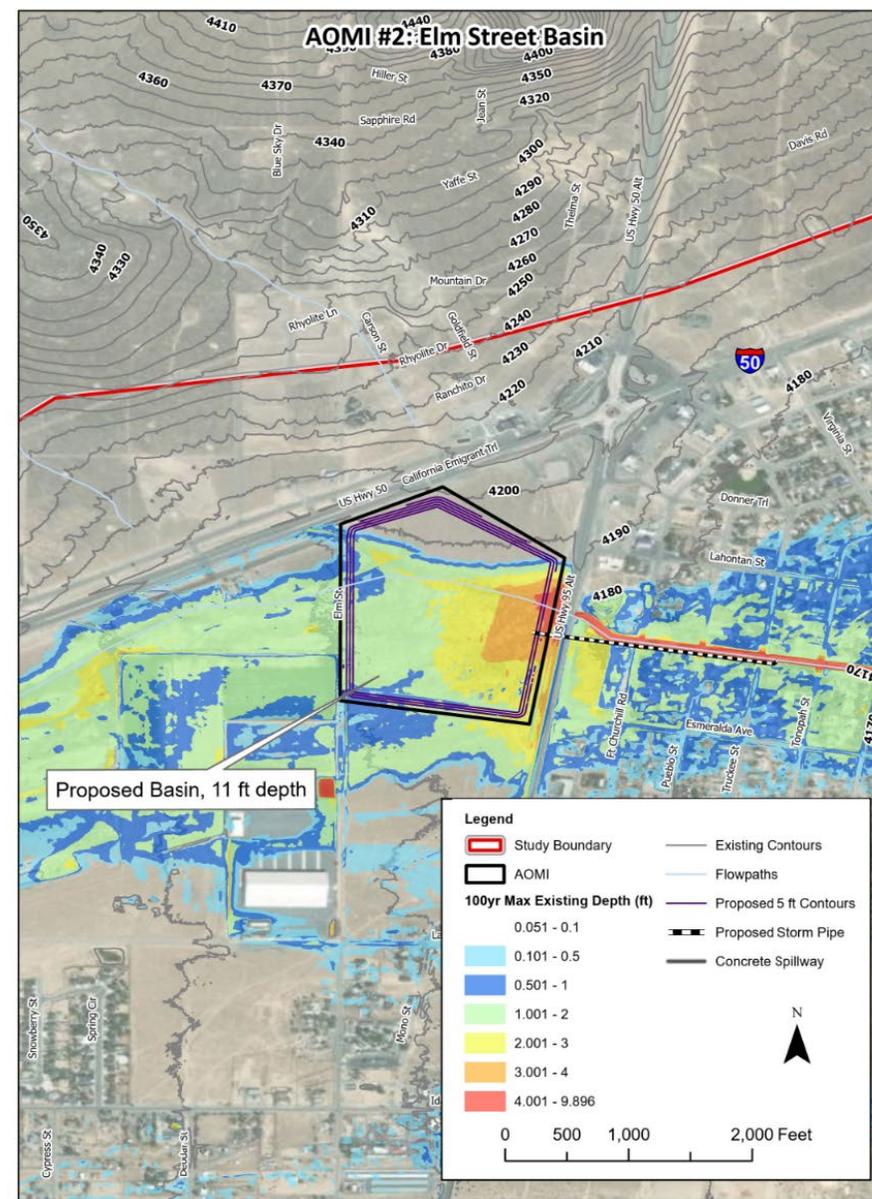
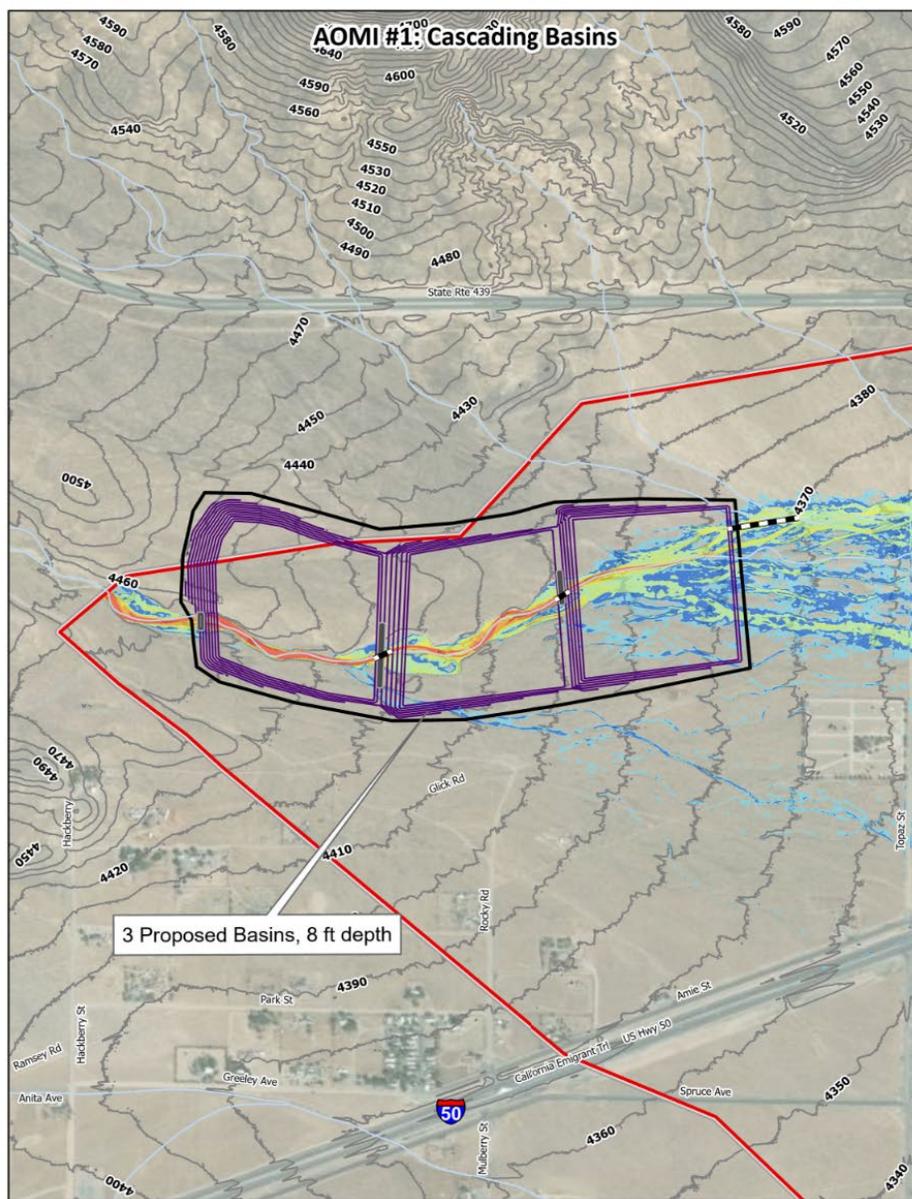
Staff Maintenance Concerns

Solutions & Recommendations

- Focused on regional projects that may qualify for grant funding
- Alleviate flooding at Highway 50 and airport
- Reduce flood hazard to areas downstream of Highway 95 Alt

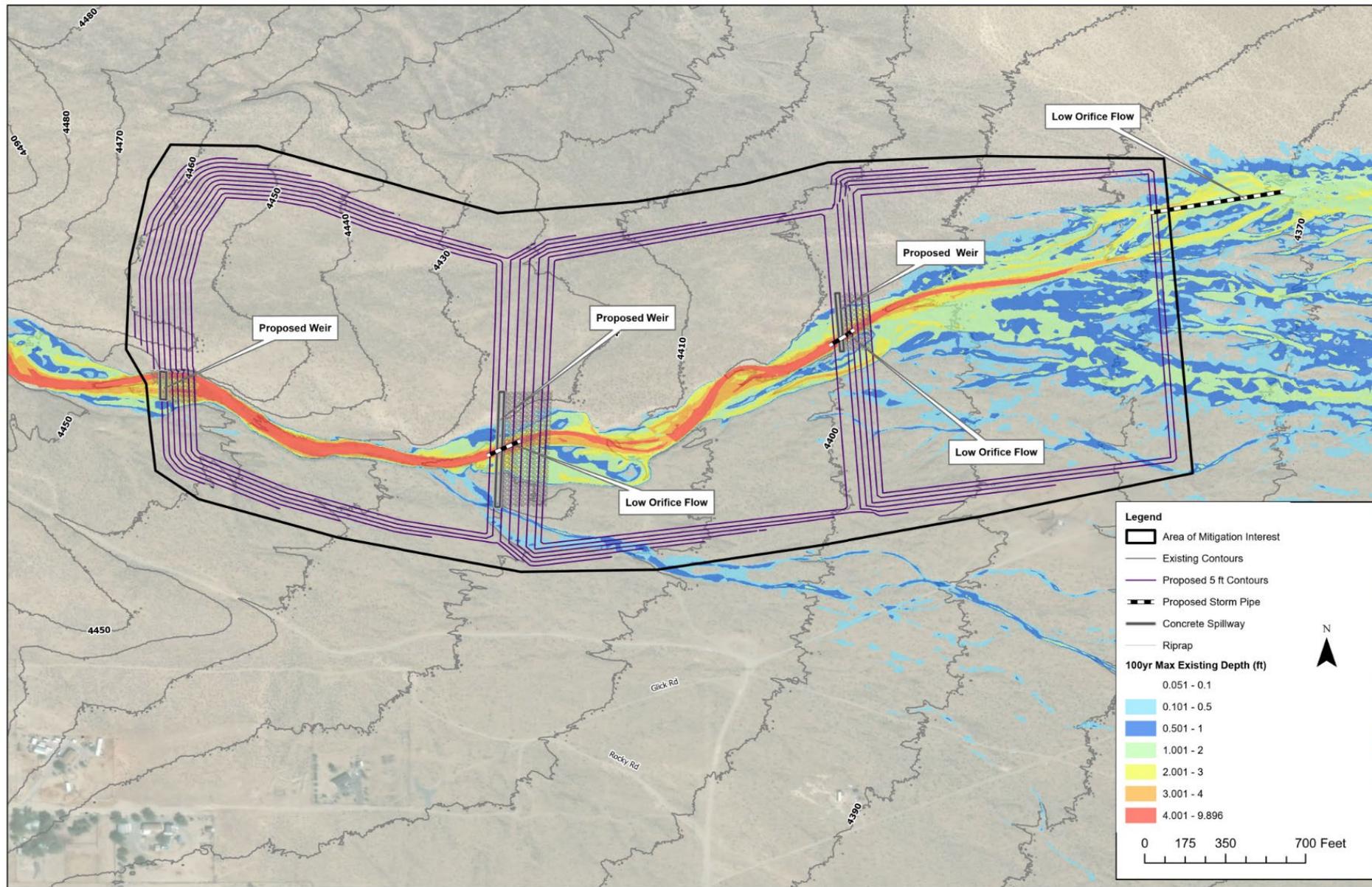
Design Goals

- 100-year protection
- Utilize potentially available open space, County property, existing features
- Match downstream channel capacity



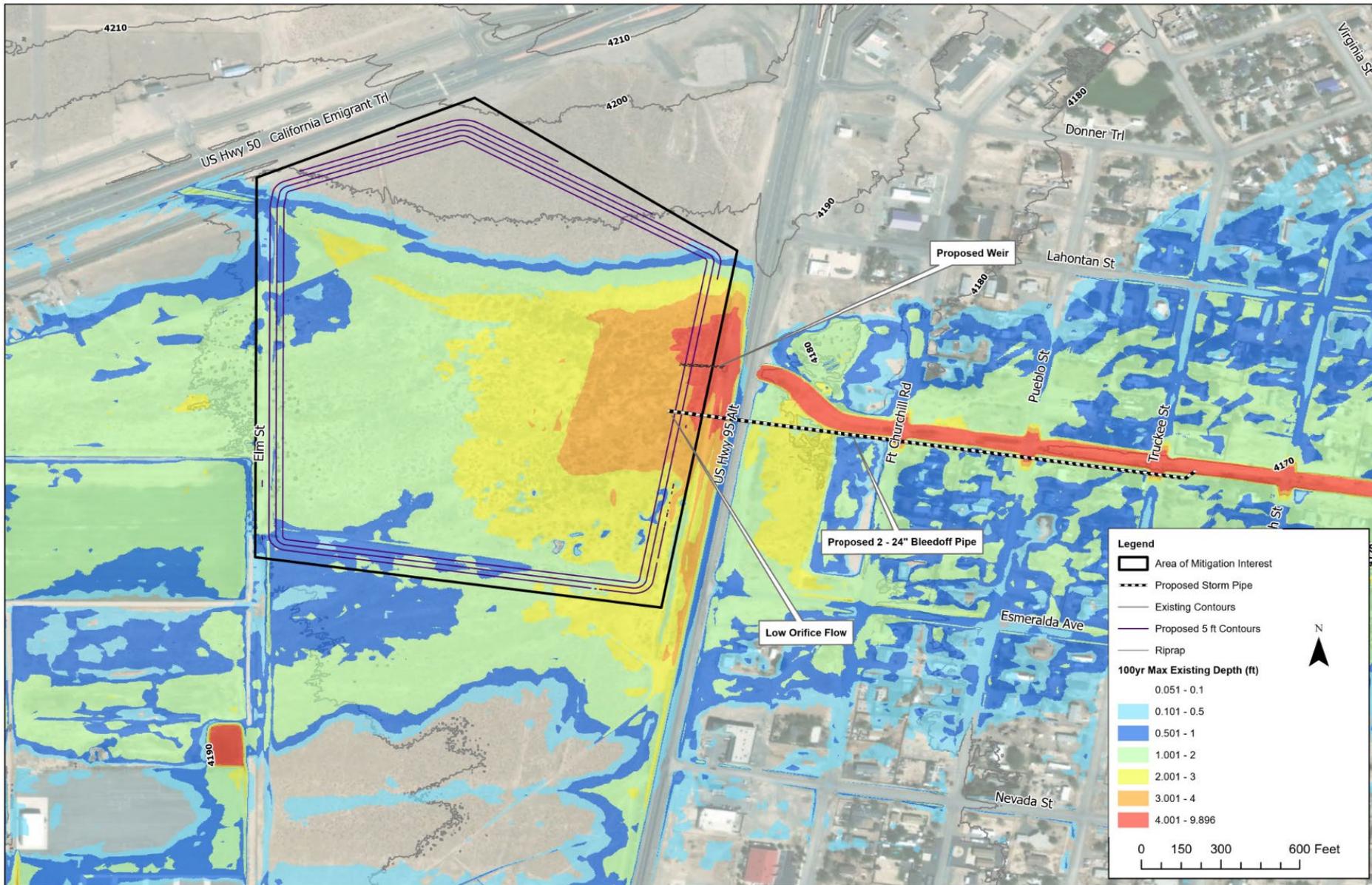
North Silver Springs Area Drainage Master Plan

Solutions and Recommendations



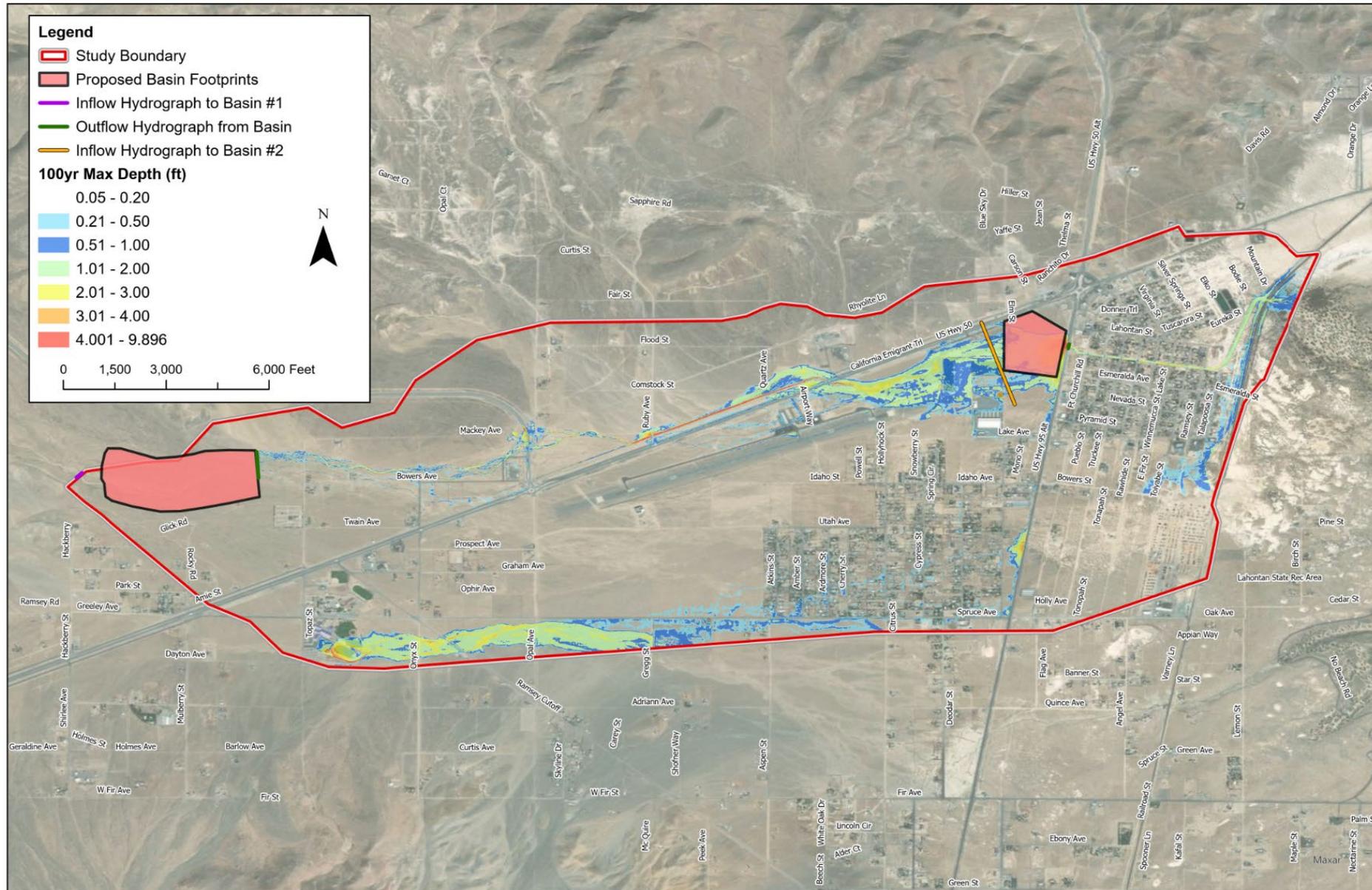
North Silver Springs Area Drainage Master Plan

Solutions and Recommendations



North Silver Springs Area Drainage Master Plan

Solutions and Recommendations



North Silver Springs Area Drainage Master Plan

Solutions and Recommendations

Summary of Conceptual Design

Table 7 : Benefit Cost Ratio

Number of Properties Impacted	586
Approximate Population	2,342
Social Benefit	\$10.8 Million
Standard Mitigation Benefit	\$45.5 Million
Total Mitigation Project Benefit	\$56.4 Million
Construction Cost	\$51 Million
Annual Maintenance Cost	\$50,000
Total Mitigation Project Cost	\$52.6 Million
Benefit Cost Ratio Using 3.1% Discount Rate	1.04

Next Steps

- **Possible Board Action:**
 - **Discussion**
 - **Acceptance and direction to staff concerning the exploration of funding opportunities**
- **Future South Silver Springs ADMP could potentially address neighborhood flooding and sediment concerns along Spruce Ave.**