

# North Valley Flood Update – February 2022

North Valleys Watersheds  
Cold Springs  
West Lemmon Valley  
East Lemmon Valley

White  
Lake

Silver  
Lake

Swan  
Lake





## Washoe County Commission Directives

- ✓ Manage Swan Lake within current boundaries
- ✓ Prevent water from entering homes and businesses
- ✓ Maintain open access for residents/emergency responders



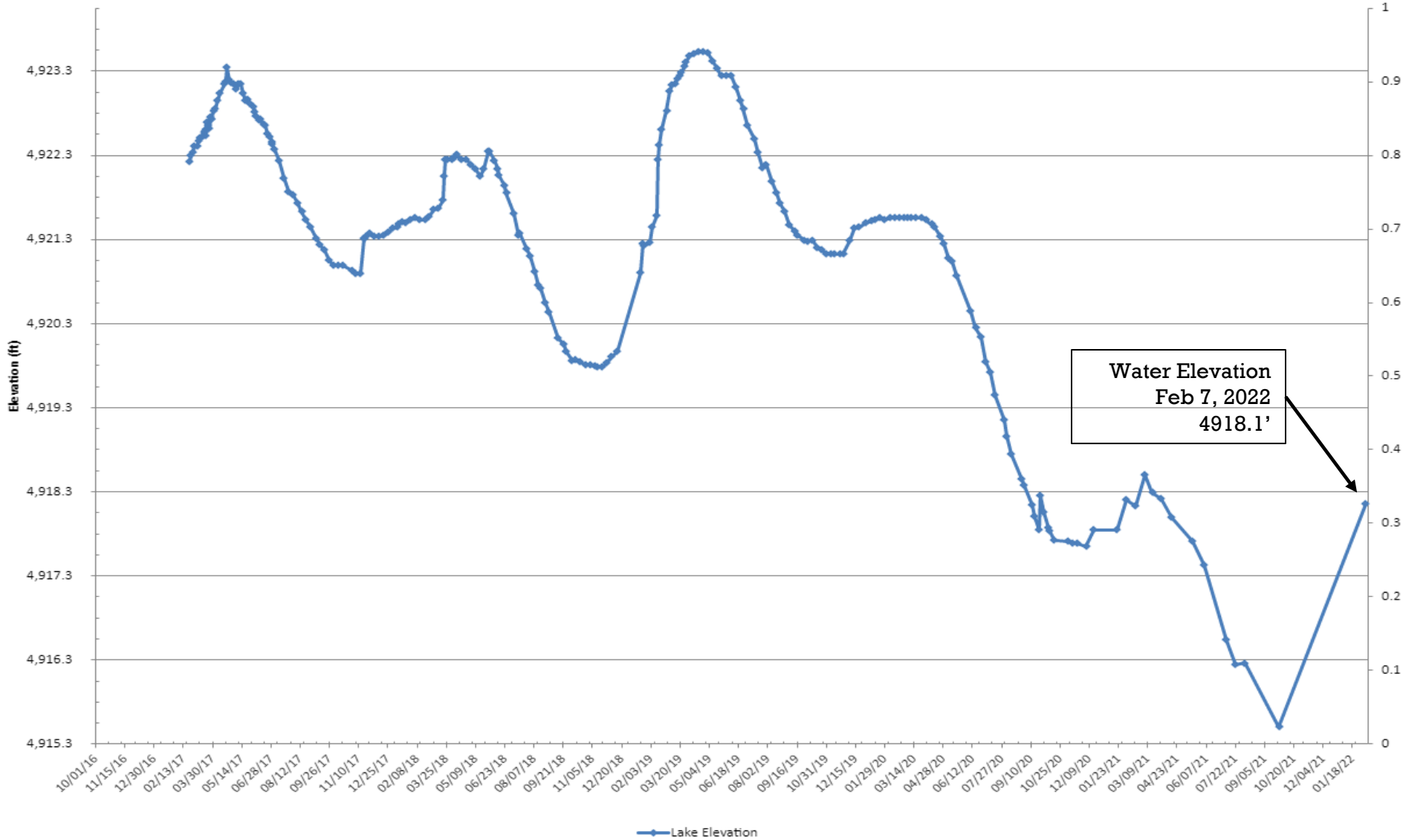
## Update Items:

- ✓ HMGP Residential Property Purchase Program
- ✓ Temporary Barrier Removal
- ✓ FEMA 100-Year Flood Plain
- ✓ Long-Term Mitigation

# North Valley Flood Update – February 2022



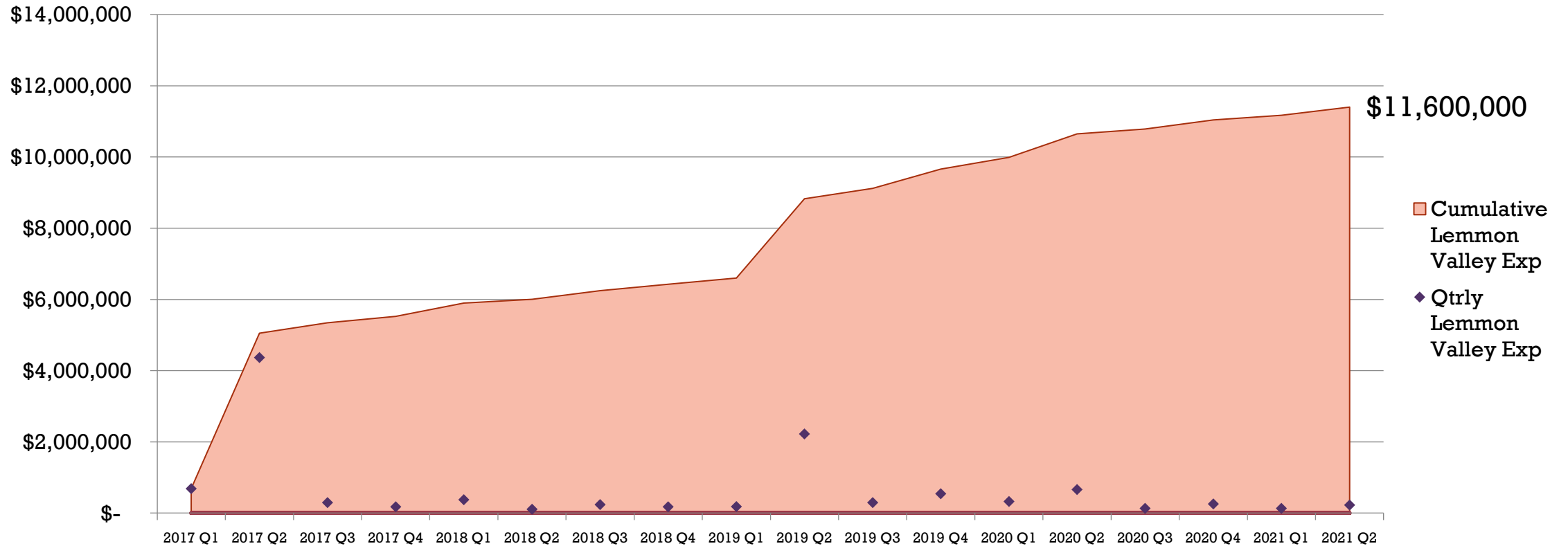
### Swan Lake Water Elevations 2017-22





## Flood response funding: GF contingency, stabilization and water rights sale proceeds

- ≈ \$10M General Fund
- ≈ \$1.6M Utility Fund



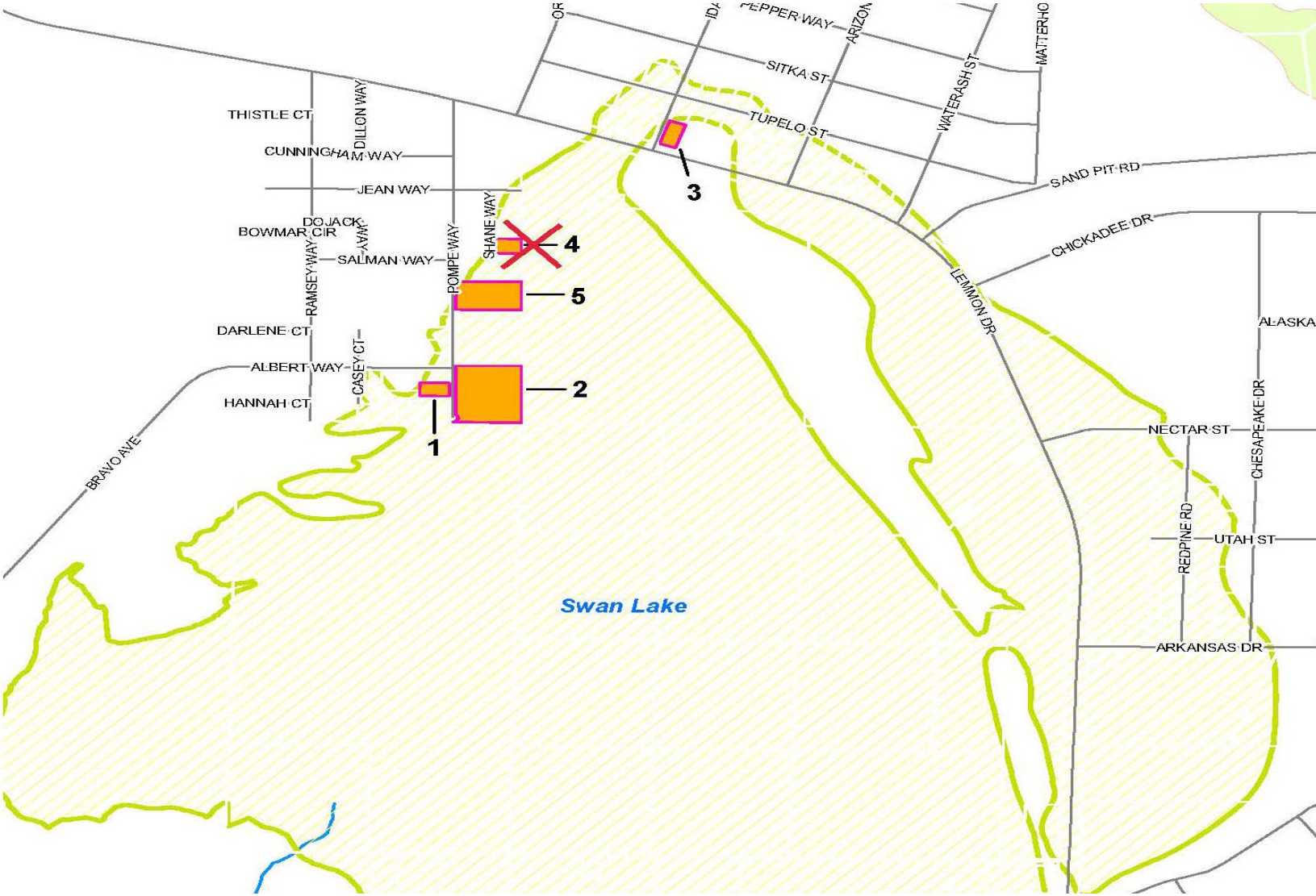


### **HMGP Residential Property Purchase Program**

Remove residential property from flood impacted area, return property to open space, eliminate future mitigation costs.

- 3 properties successfully purchased
- 4th property – Escrow to close March 1st
  
- Property clearing/clean up – Summer 2022
  - All buildings, debris, utility connections, etc.
  
- Field work complete with grant closeout – End of 2022
  
- Future grant funding opportunities for additional purchases

# North Valley Flood Update – February 2022





## **Temporary Barrier Removal**

- Temporary HESCO and Tiger Dam barriers
  - Pumps, piping and roadway crossings
  - Removal of all culvert plugs under residential roadways
  - Restoration of Lemmon Drive
  - Restoration of residential driveways – Lemmon Drive, Pompe Way
  - Regrade roadside ditches
  - Final debris removal
  - Earthen berm – end of Pompe Way
- Arkansas Road - September 2019
- Lemmon Valley Elementary School – July/August 2021
- Lemmon Drive culvert plugs – January 2022

## **Project Complete – April 2022**



# North Valley Flood Update – February 2022

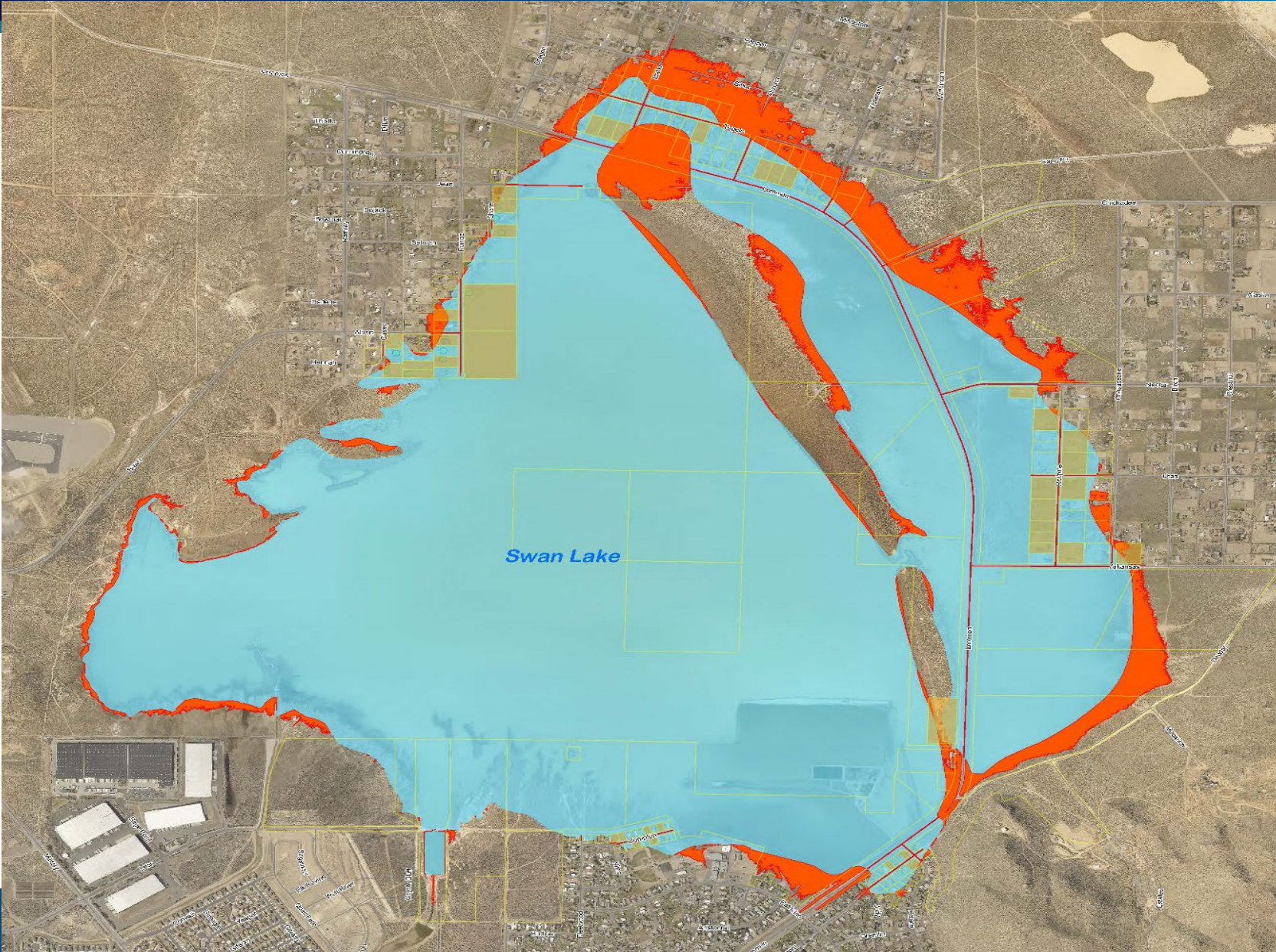




## FEMA 100-Year Flood Plain

- 2017 flooding revealed inaccurate FEMA 100-year flood risk maps (FIRM)
- Initiated study to update regulatory 100-year (1%) flood plain limits and depth
  - Statistical and hydrological analysis – includes historic, measured data sets and risk assessment
  - 500-year non-regulatory flood plain
- DRI Study - completed January 2022
  - Conform data sets
- Update flood plain - current and future mitigation projects
- Commitment to potential impacted residents/businesses

# North Valley Flood Update – February 2022





## Long-Term Mitigation

Reduce flood risk to existing and future residents/businesses, protect critical infrastructure

- Updated Policies – volumetric mitigation, retention/detention basins
- “Matrix”
  - 5 alternatives, reduced from 25+ concepts
  - Phase I engineering studies and risk assessments

## Swan Lake Operation Plan

- During high precipitation/flood
  - Divert water away from lake, protect residents/businesses/infrastructure
- During drought/no precipitation
  - Divert water to lake, preserve wildlife habitat and enhance quality of life



## Stakeholders

- Existing residents/businesses
- Washoe County School District
- City of Reno
- Regional Transportation Commission
- FEMA
- State of Nevada – Flood Plain Management
- Nature Conservatory/Audubon Society/wildlife partners/Parks Commission
- New Development

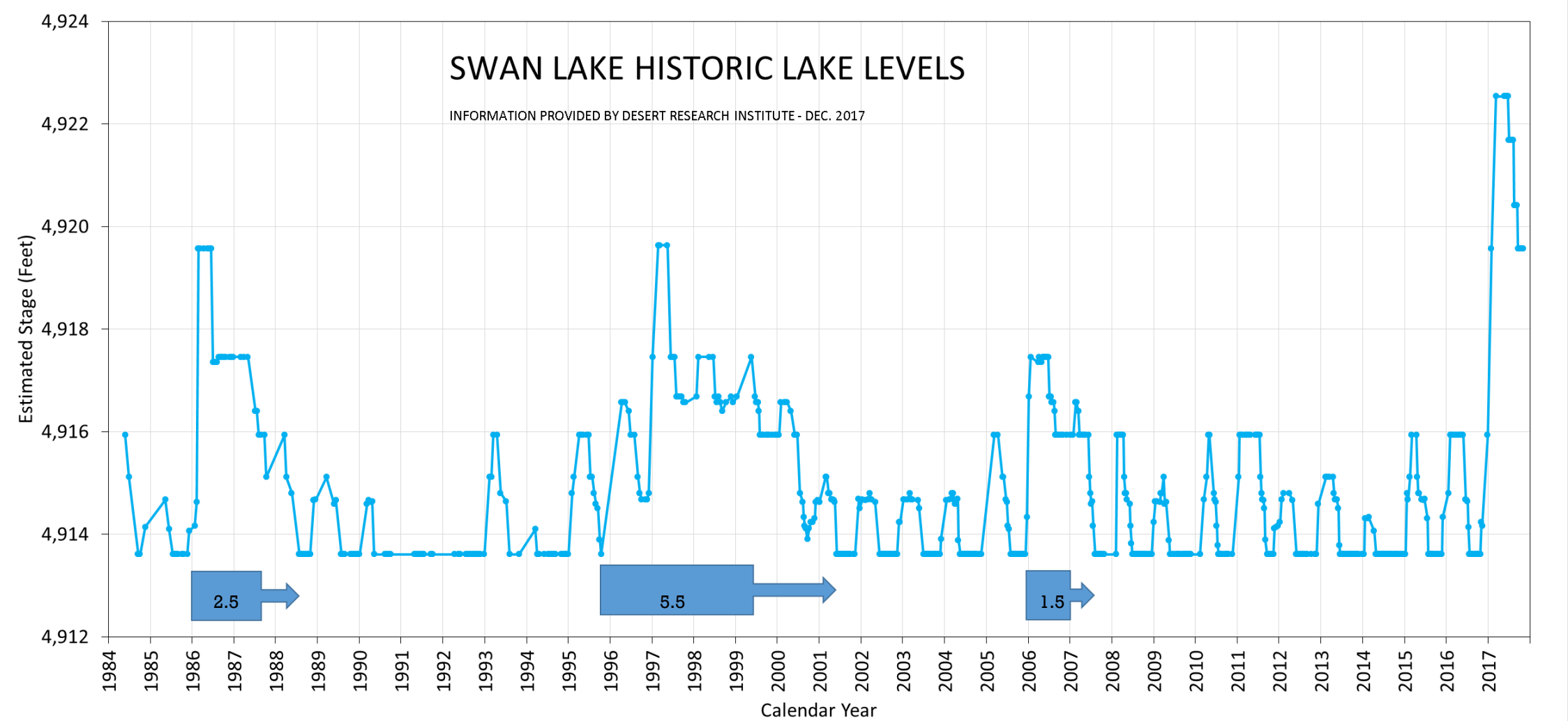
## Project(s):

- Lemmon Drive – RTC roadway project
- Lemmon Valley Water Reclamation Facility – Washoe County Utility
- COR Irrigation Pipeline

# Thank you



# North Valley Flood Update – February 2022



# North Valley Flood Update – February 2022

