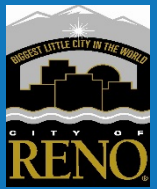




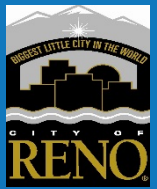
2017 North Valleys Flood Update



- **SUMMARY OF 2017 FLOOD EVENTS**
- **2017 FLOOD RESPONSE - PUBLIC SAFETY MISSION**
- **2017 FLOOD CLARIFICATION AND FACTS**
- **2017/18 PREPARATION AND CURRENT ACTIVITIES**
- **OUTLOOK/NEXT STEPS**



SUMMARY OF 2017 FLOOD EVENT



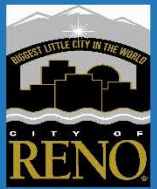
- **20+ Atmospheric River Events (2016\17 water year*)**
 - Saturated Ground Causing Runoff
 - Over 16.82 inches total precipitation (rain and snow) *Desert Springs Guage
 - Precipitation and runoff records

RESULT – Severe Flooding in Northern Nevada Counties - Presidentially Declared Flood Disasters – January (4303) and February (4307)

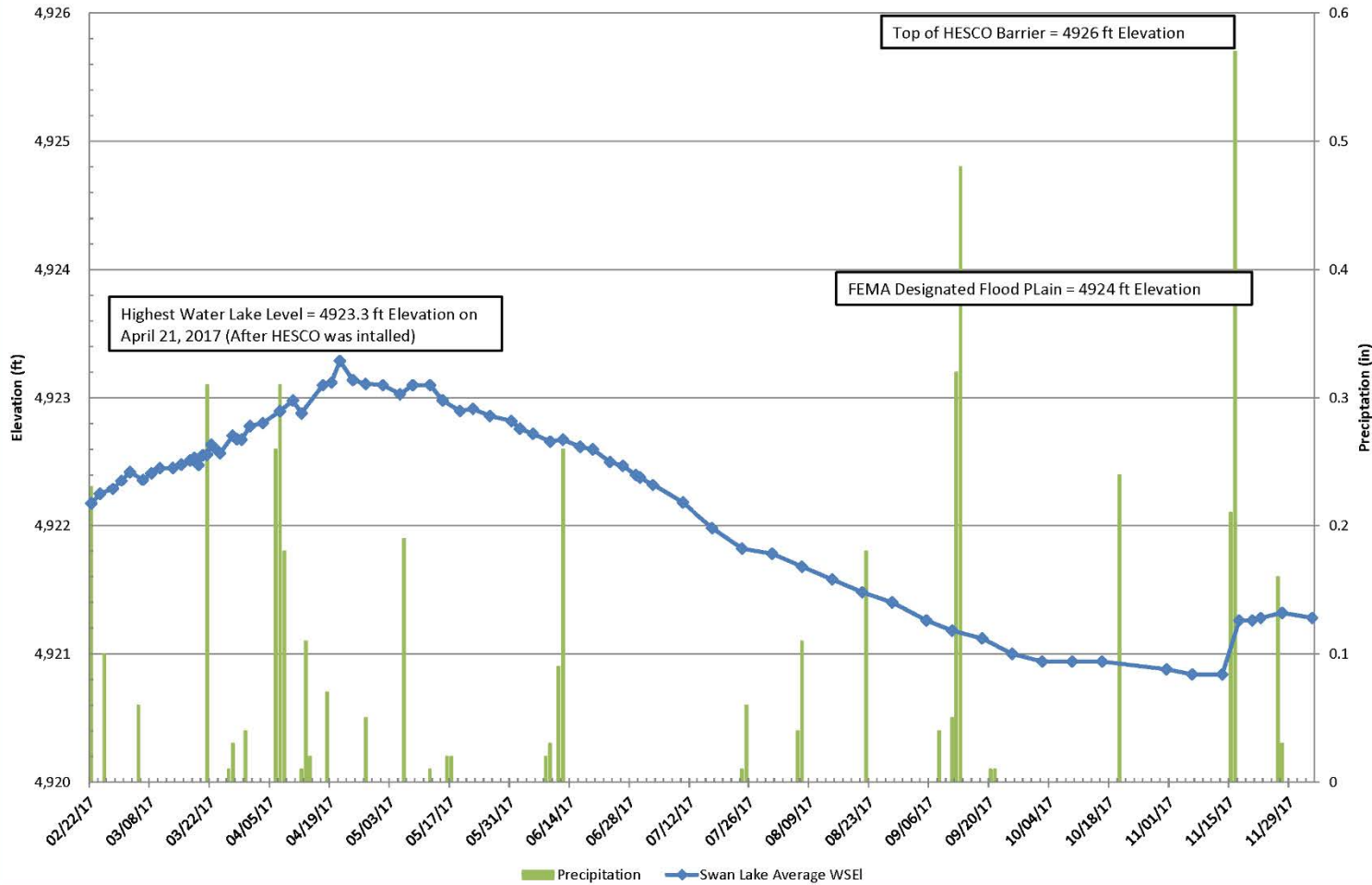
- **Impacts**
 - Public Infrastructure
 - Residential Impacts
 - FEMA Claims For Northern Nevada – Approaching \$30 million for Two Disasters
 - WC Has Expended Over \$6 Million
 - COR Has Expended Over \$2 Million



SUMMARY OF 2017 FLOOD EVENT

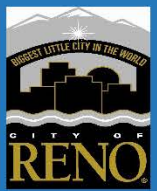


Swan Lake Water Elevations 2017

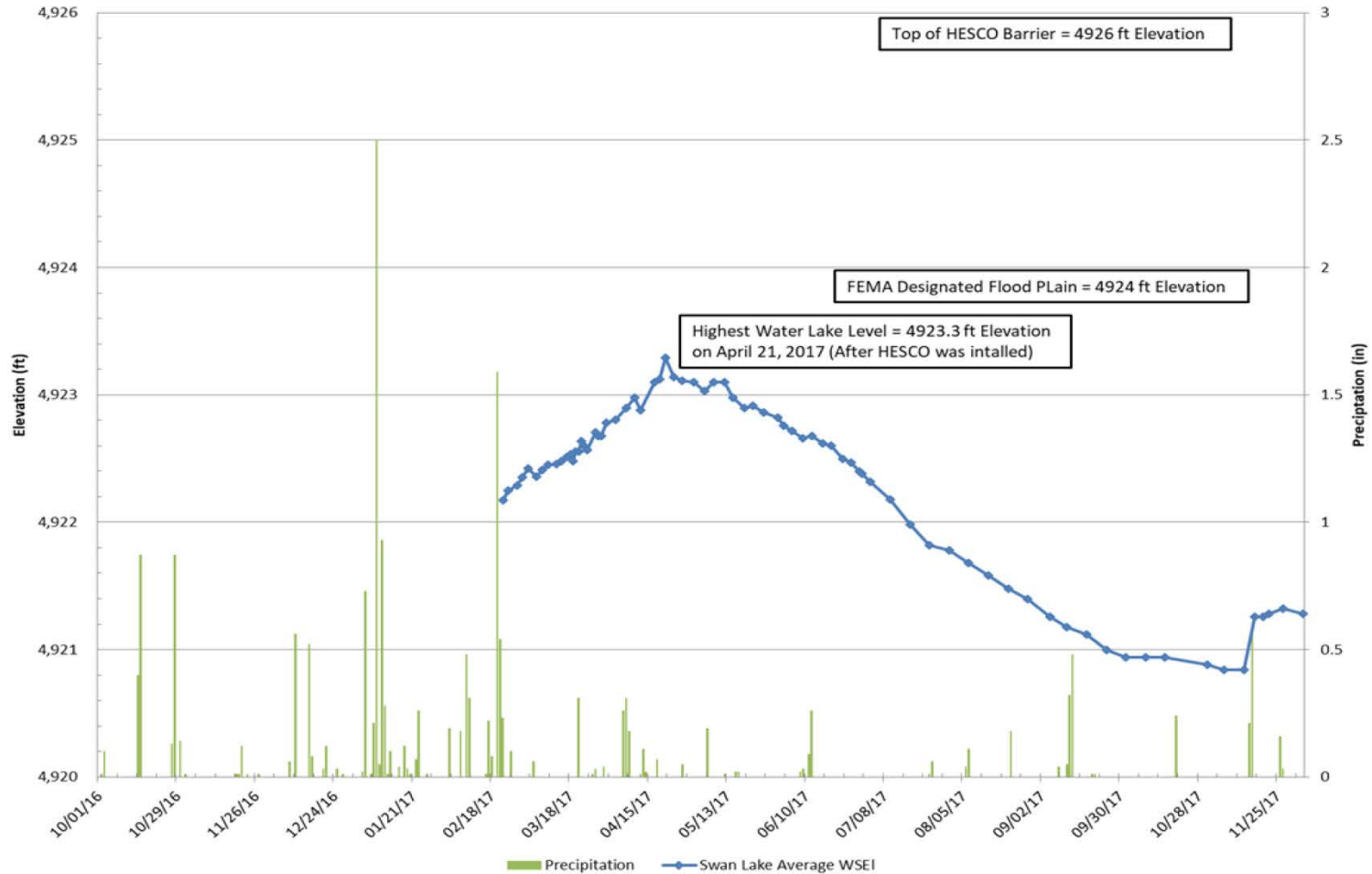




SUMMARY OF 2017 FLOOD EVENT

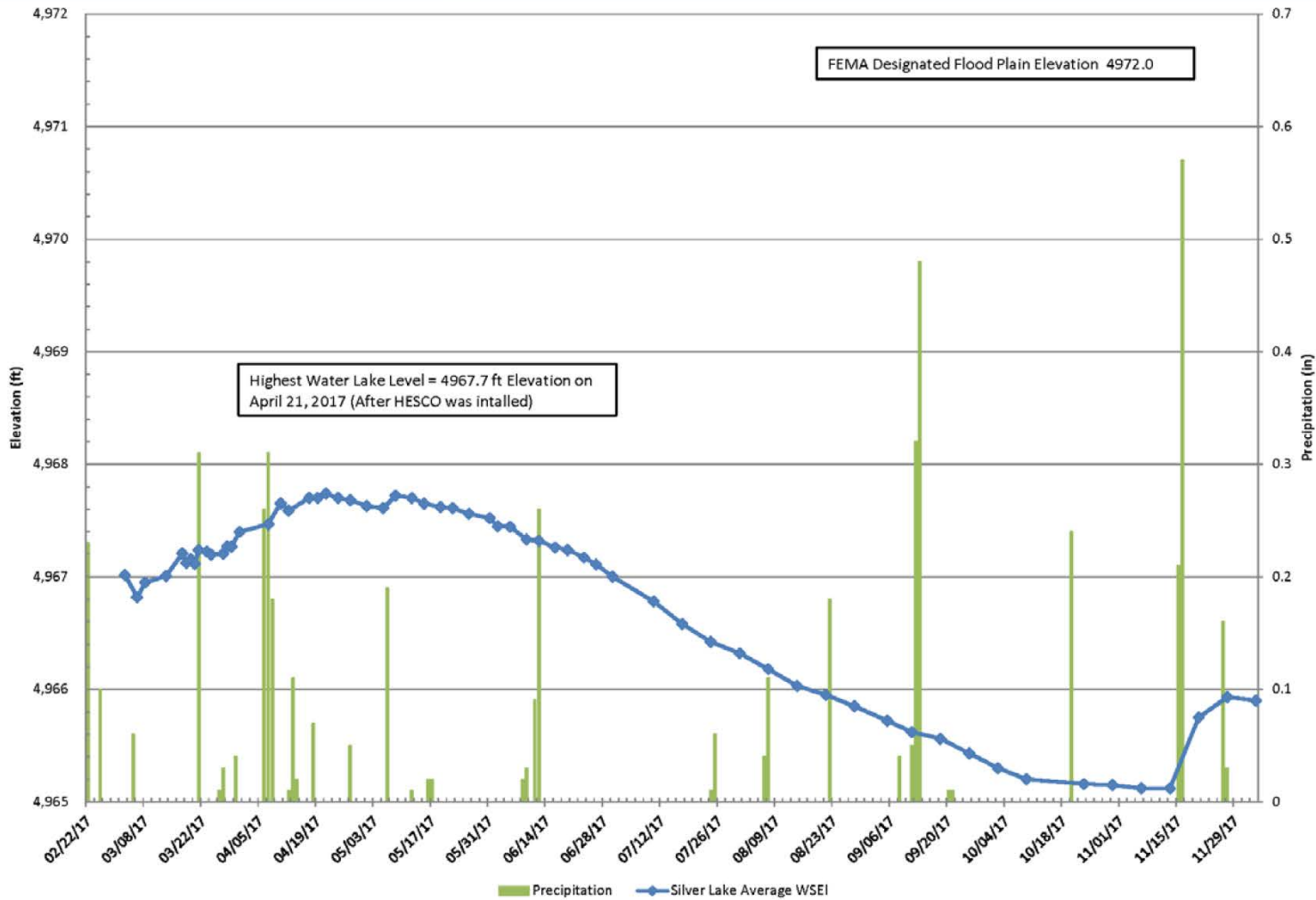
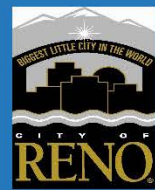


Swan Lake Water Elevations 2017





SUMMARY OF 2017 FLOOD EVENT





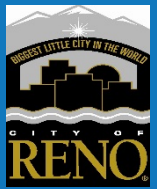
FLOOD RESPONSE – PUBLIC SAFETY MISSION



- **EOC**
 - **Activated EOC January 2017**
 - **Local Jurisdictions/USACE/State of Nevada/FEMA/Task Force 1**
- **Washoe County and the City of Reno**
 - **Notifications/Site Visits - Residents and Business Owners**
 - **HESCO Temporary Flood Barrier in Swan Lake and Silver Lake**
 - **Storm water pumps, diver, maintaining protection areas**
 - **Alternative Access for Businesses – Silver Lake**
- **WC Residents**
 - **Short Term Hotel Stays with Conversion to Long Term Housing for 14 Families**
 - **Sandbagged Homes/Church - NDF**
 - **Social Services Command Post**
 - **Portable Showers/Porta-Potty**
 - **Gift Cards/Fund Raiser/Water/Food**



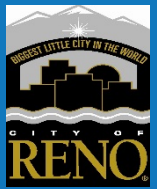
FLOOD RESPONSE – PUBLIC SAFETY MISSION



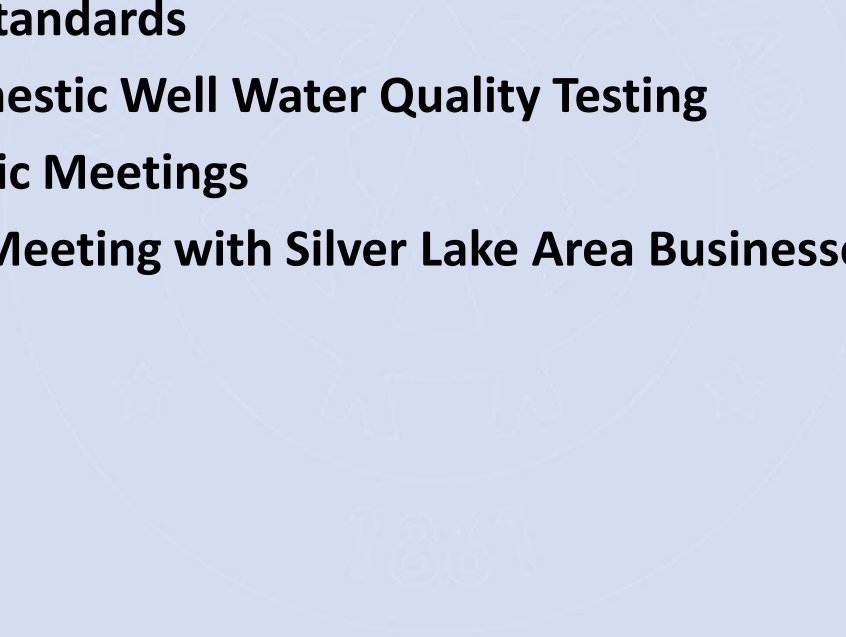
- **Waste Water Treatment Facilities – Lemmon Valley and Stead**
 - **Protection of LV Waste Water Reclamation Facility – Raise Berms**
 - **Temporary Additional Disinfection Installed**
 - **Sealing Manholes**
 - **NDEP recognizes proactive work and is satisfied**
 - **Alternative Pumping Plan For Lemmon Valley to Stead**
- **Washoe County and City of Reno Roadways**
 - **Cleaning/clearing ditches and culverts**
 - **Closed Lemmon Drive – March 14th With HESCO Construction**
 - **Aug 4th – Were able to open Waterash St. To the South**
 - **Posted 25 mph**
 - **Prepared to reinstall HESCO when required**
 - **Deodar Road Used As Alternative Route**



FLOOD RESPONSE – PUBLIC SAFETY MISSION

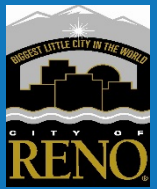


- **Washoe County Health Department**
 - **Mosquito abatement – Additional \$800k Approved**
 - **Swan Lake Water Quality Tests– Meets/Exceeds Recreational Water Quality Standards**
 - **Free Domestic Well Water Quality Testing**
- **Multiple Public Meetings**
- **City of Reno Meeting with Silver Lake Area Businesses**





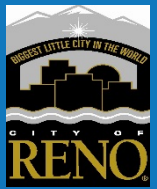
CLARIFICATION AND FACTS



- **Number of LV Homes Impacted**
 - **Red and Yellow Tagged Homes**
- **Waste Water Treatment Plants**
- **New Development**
- **Pumping Silver Lake to Swan Lake**
- **Drilling Holes in Aquifer**
- **Pumps and Moving Water Out of Basin**
- **Aeration**
- **Dredging**
- **Home Elevation**
- **etc.**



CURRENT ACTIVITIES FOR UPCOMING WINTER



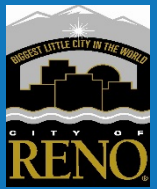
PLANNING FOR THE NEXT WINTER and SPRING

- Maintain HESCO Temporary Flood Barriers
- Respond to Storm Water
- Maintain Sewer Treatment Plant Operations
- Continue Working with Emergency Service Providers, State of Nevada, FEMA, FHWA
- Continue Communication

Requirement: Maintain Existing Protection Level for Area Residents and Businesses



OUTLOOK/NEXT STEPS



- **Closed Basin Flood Response Plan**
- **Closed Basin Flood Mitigation Plan**
- **FEMA Hazard Mitigation Grant Program – Acquisition and Demolition**
- **Review/Update Development Code**
- **FEMA Reimbursement**
- **Public Outreach/Planning**