The Pursuit of a FEMA Map Revision for the SouthEast Connector in Reno, Nevada

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• SouthEast Connector – opened Spring 2018

• Elevated roadway bisecting the Steamboat Creek floodplain and floodway AND Critical Flood Pool of the Truckee River

• Would raise BFE in floodway – mandated CLOMR
Challenges

• Steamboat Creek - delineated in 1987

• Truckee River - delineated in 1970s

• Project area - City of Reno, Washoe County, City of Sparks, and TRFMA

• Map revisions on Steamboat Creek - late 1980s and early 1990s

• Steamboat Creek upstream of the project area - modified in 2000’s with updated regulatory flows
Effective FEMA Floodplain and Floodway in SEC Project Area
City of Reno Critical Flood Pool
Challenges

• The USACE Truckee River Project had updated HEC-RAS models for Truckee Meadows region.

• Design of SEC Project was done with a combination of 1D and 2D hydraulic models.

• Development within the floodplain and floodway was not reflected in the regulatory FIS.
Proposed WSEL – existing WSEL results of design model with 117-year hydrology
Approach

- Only revise the floodway/floodplain of the Steamboat Creek upstream of backwater area.
- Utilize the FIS regulatory peak flow on Steamboat Creek
- Use the SEC project’s pre- and post-HEC-RAS models, extended to the upstream project boundary
Process

- Got buy-off of process from floodplain managers, TRFMA and FEMA before starting analysis

- Delineated floodplain and floodway of Steamboat Creek for revised existing conditions (Corrected Effective)
  - Corrected effective model showed increase in BFE and inundation area above regulatory floodplain

- Delineated with-project floodplain and floodway
Community Engagement

- Corrected effective model showed higher BFE than effective floodplain
- Third party review
  - Revised roughness through north Butler Ranch – lowered increase of existing conditions over regulatory floodplain considerably
- City of Reno held public meetings
- Looked at mitigation measures through project area
• With-project floodplain had slightly lower BFE and inundation than Corrected Effective in developed areas.
Pre-SEC floodplain – FEMA effective floodplain
Pre-SEC floodplain – FEMA effective floodplain
Proposed floodplain –
FEMA effective floodplain
Proposed floodplain – FEMA effective floodplain
Proposed floodplain –
Existing floodplain
Proposed floodplain – Existing floodplain
Proposed WSEL – Existing WSEL
Conclusion

- CLOMR was approved prior to construction, LOMR will be submitted in 2018/2019
- Will modify ONLY Steamboat Creek floodplain and floodway to with-SEC
- Delineated with-project floodplain will include expanded properties, most can be removed with Elevation Certificates
Questions?