

Truckee Meadows, NV

General Reevaluation Report and EIS

Civil Works Review Board

COL Michael J. Farrell
District Commander, Sacramento District

17 Dec 2013



US Army Corps of Engineers
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Non-Federal Sponsor

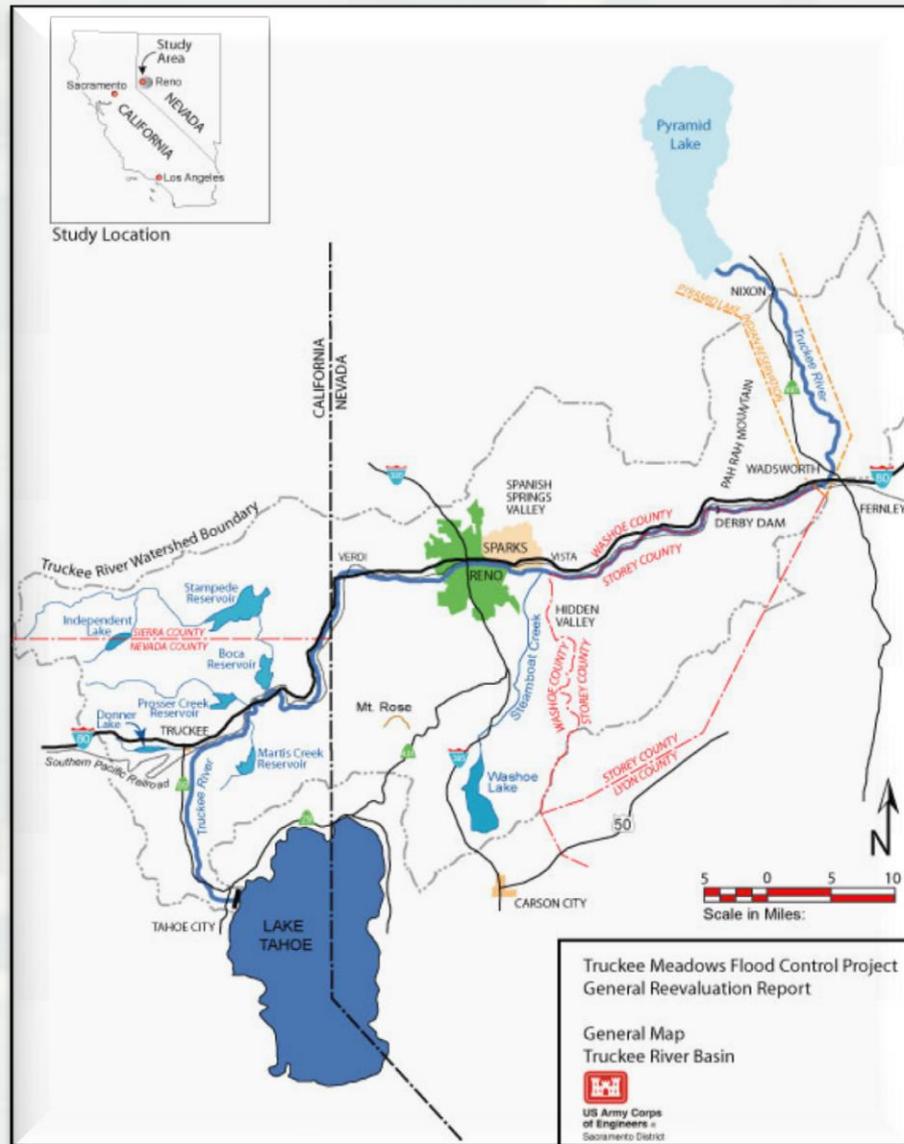


- Truckee River Flood Management Authority (TRFMA)
- Tax funded board representing local government:
 - City of Sparks
 - City of Reno
 - Washoe County



Truckee River Watershed

- Watershed: 3,060 sq miles
- Major upstream reservoirs:
 - Lake Tahoe
 - Stampede
 - Boca
 - Prosser
 - Martis
- Major urban areas:
 - Reno, NV
 - Sparks, NV
- Study area includes approximately 60 miles of the Truckee River – from upstream of Reno to Pyramid Lake



Legislative Authority

- Flood Control Act, 1954 & 1962
- Water Resources Development Act, 1988
- Fallon Paiute Shoshone Indian Tribes Water Rights Settlement Act of 1990
- Energy and Water Development Appropriations Act, 1996
- Energy and Water Development Appropriations Act, 2006, Section 113



1988 Authorized Plan

- Features –
 - 12 miles of levees/floodwalls
 - 6 bridge replacements
 - 900-acre detention basin
 - Channel excavation
 - 31 acres habitat mitigation
 - Fish/Wildlife Enhancement
 - Recreation features
- BCR – 1.8 to 1
- Cost – \$78.4 M (unadjusted)
- Deferred during PED in 1992 due to increased real estate costs



Study Purpose

Re-evaluation of previously authorized project to determine continued Federal interest.



Problems

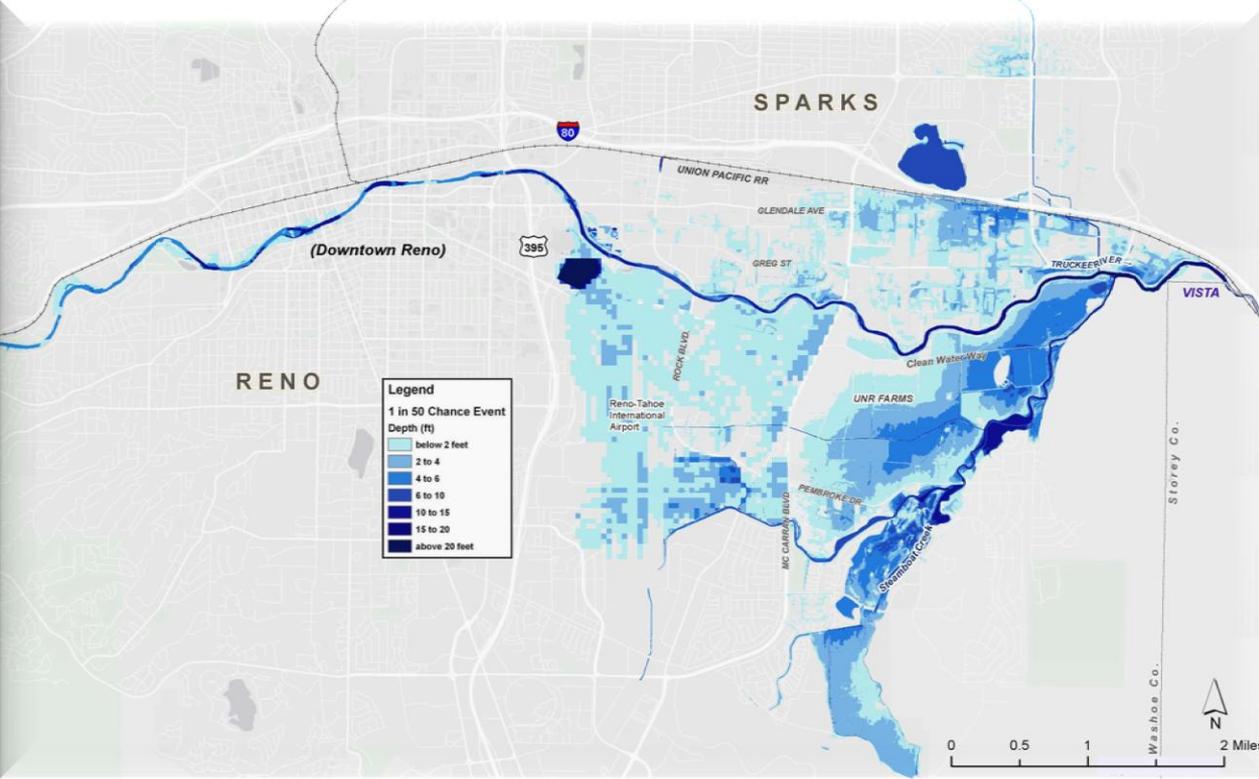
- Flood Risk: Poses a risk to life and public safety as well as to structures and contents in downtown Reno and Truckee Meadows.
- Recreation: Opportunities have not kept pace with demand.



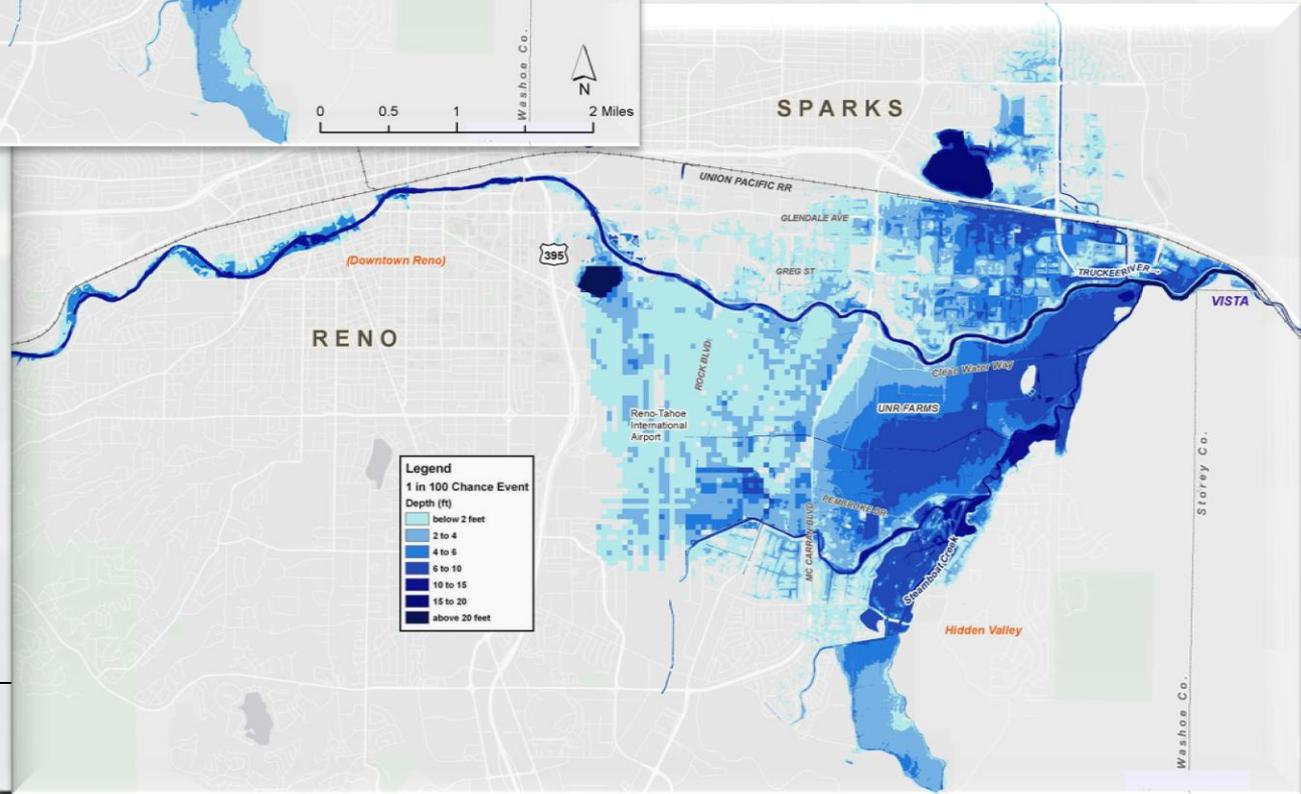
- Long history of significant flooding – 1861, 1862, 1867, 1886, 1890, 1907, 1909, 1928, 1937, 1950, 1955, 1963, 1986, **1997**, 2005.



**Without
Project
Floodplain
(1/50 ACE)**



**Without
Project
Floodplain
(1/100 ACE)**



Study Objectives

- Reduce flood damages
- Reduce the potential for loss of life from flooding
- Increase recreation opportunities along the Truckee River



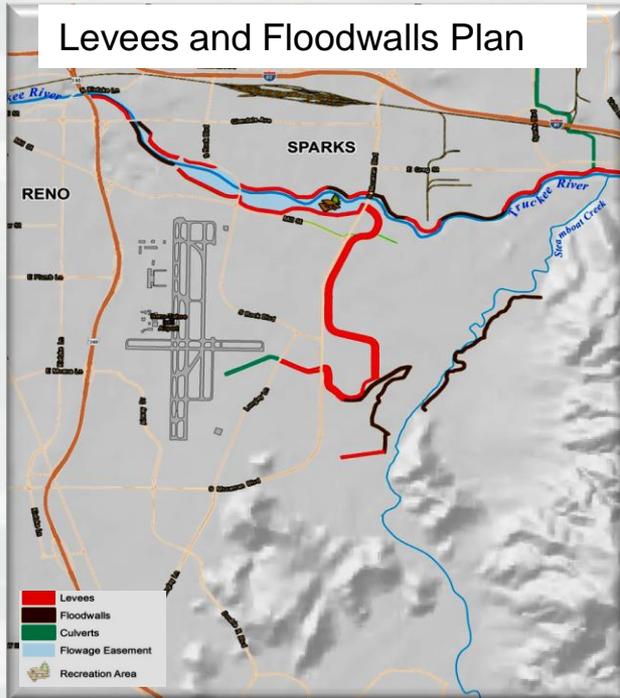
Preliminary Alternatives

- **Downtown Reno**
 - 7 alternatives consisting of: bridge modification, floodwalls, and non-structural (all eliminated during screening)
- **Truckee Meadows Reach**
 - 11 alternatives consisting of: levees, floodwalls, detention basin, and non-structural (narrowed to 3)
- **Recreation in Truckee Meadows Reach**
 - 3 alternatives

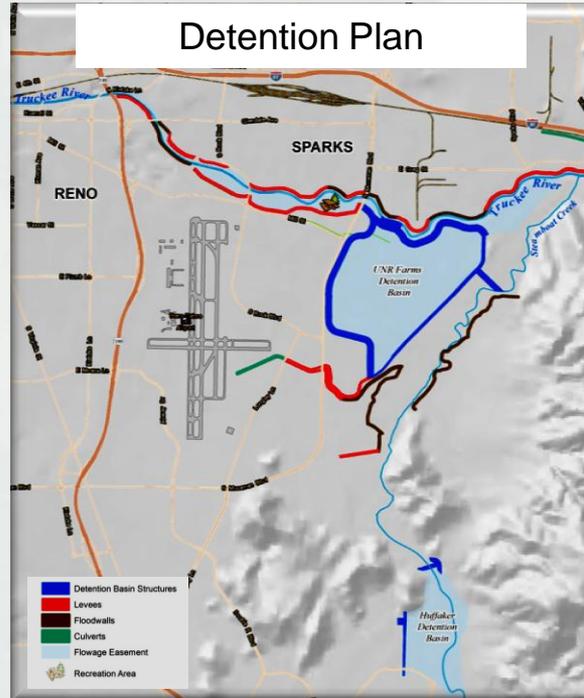


Final Array of Alternatives – Truckee Meadows Reach

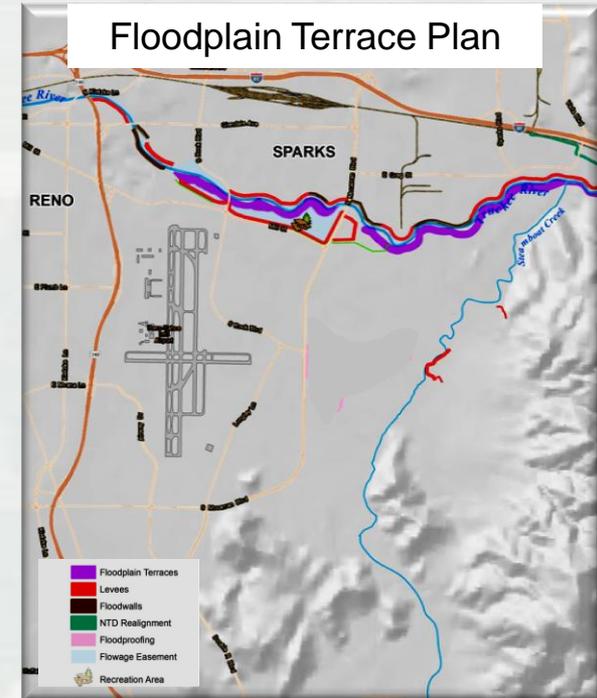
Levees and Floodwalls Plan



Detention Plan



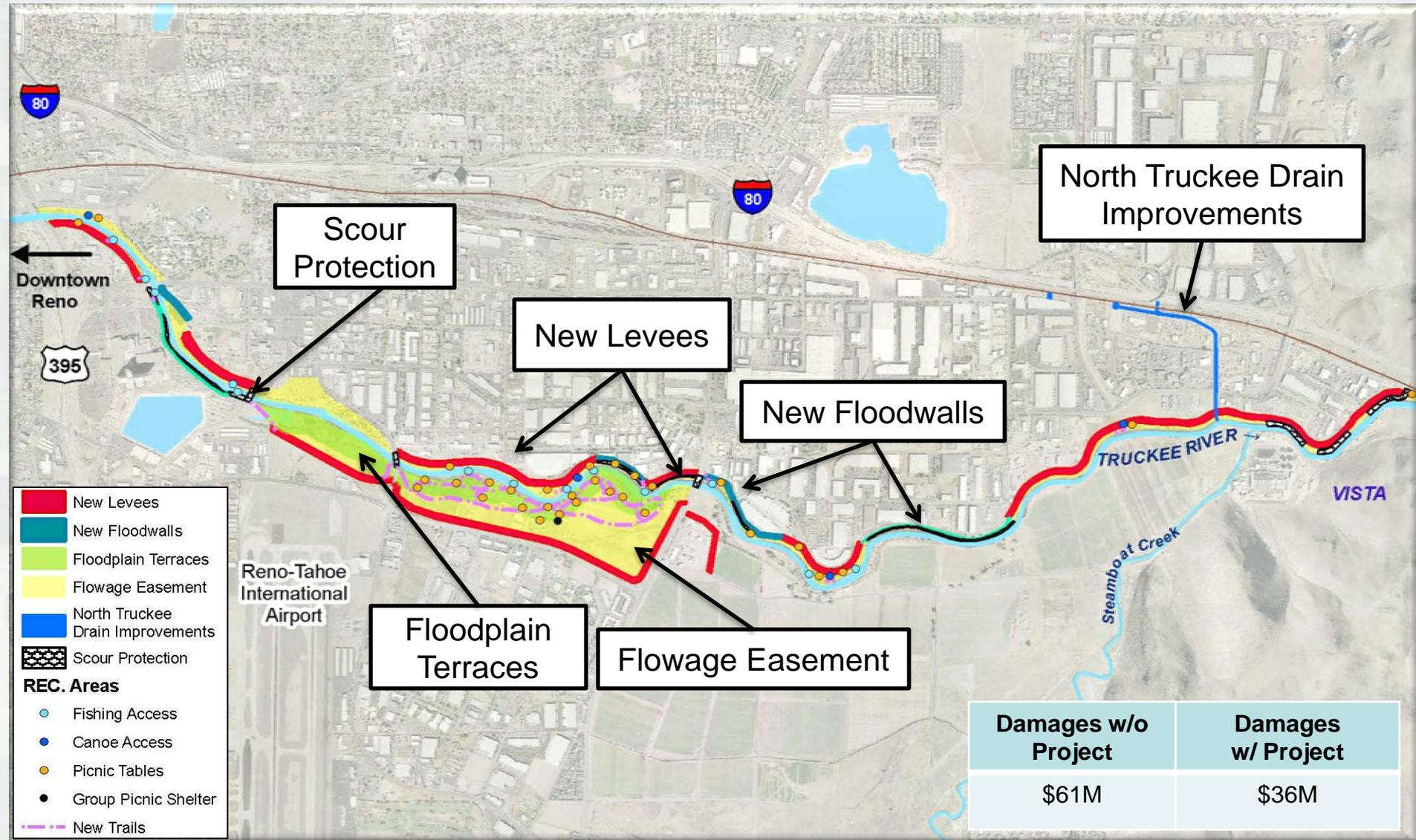
Floodplain Terrace Plan



- All have reduced footprint from the authorized project.
- Each scaled to perform at 3 flood event levels.
- Non-structural features included.
- Floodplain Management Plan will be developed and implemented by sponsor.



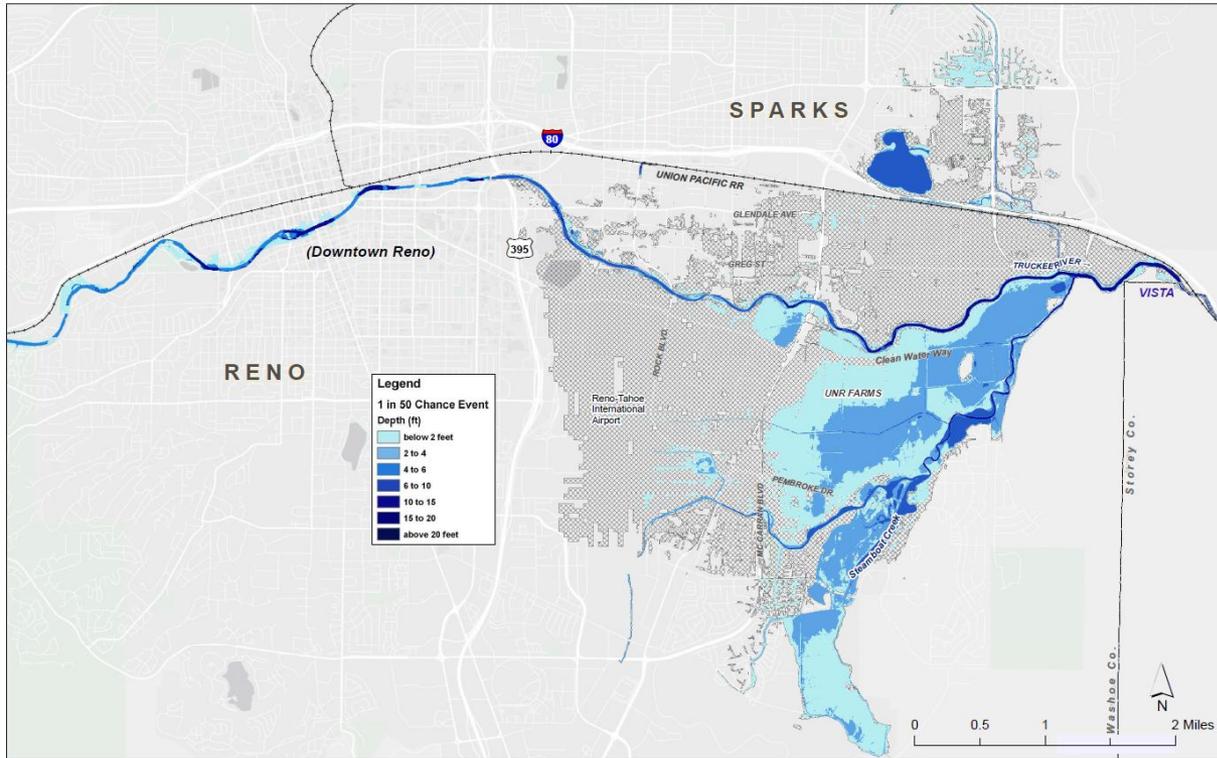
NED (Recommended) Plan Features



Residual Floodplain (1/50 ACE)



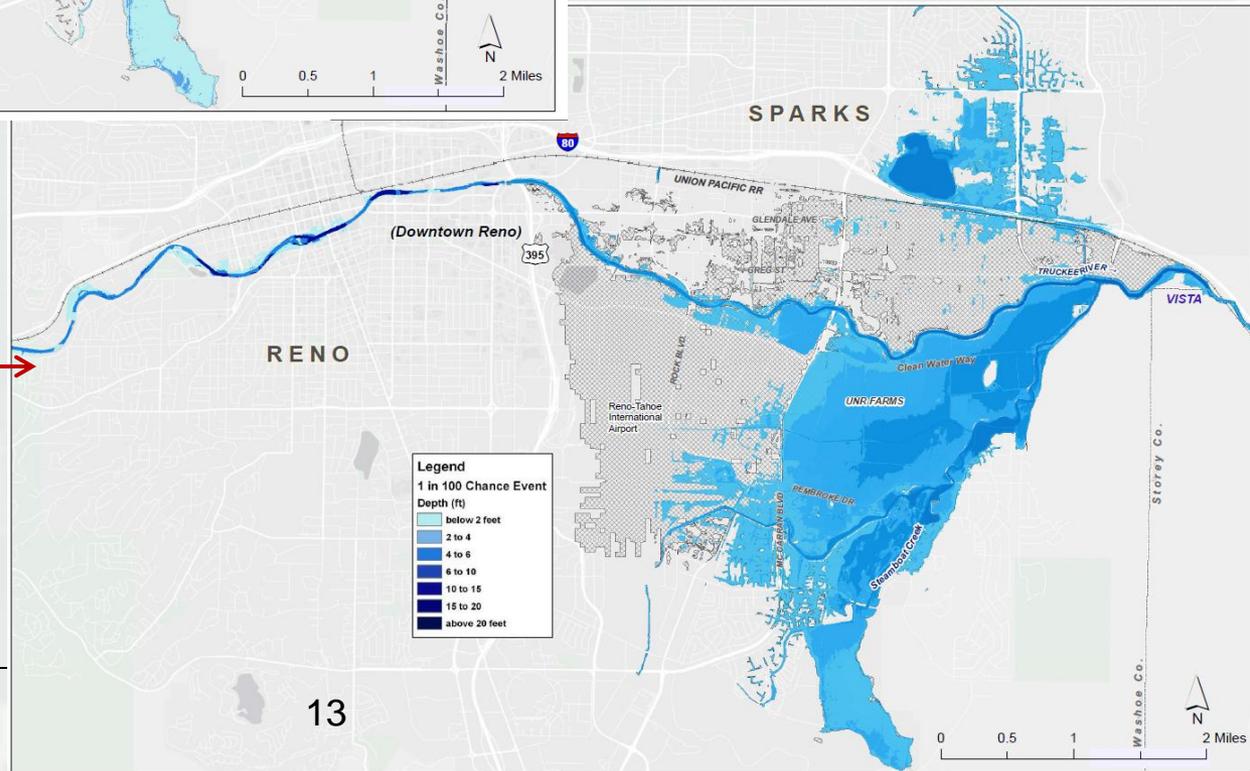
Structures in the Floodplain Total	Without Project	With Project
	717	299



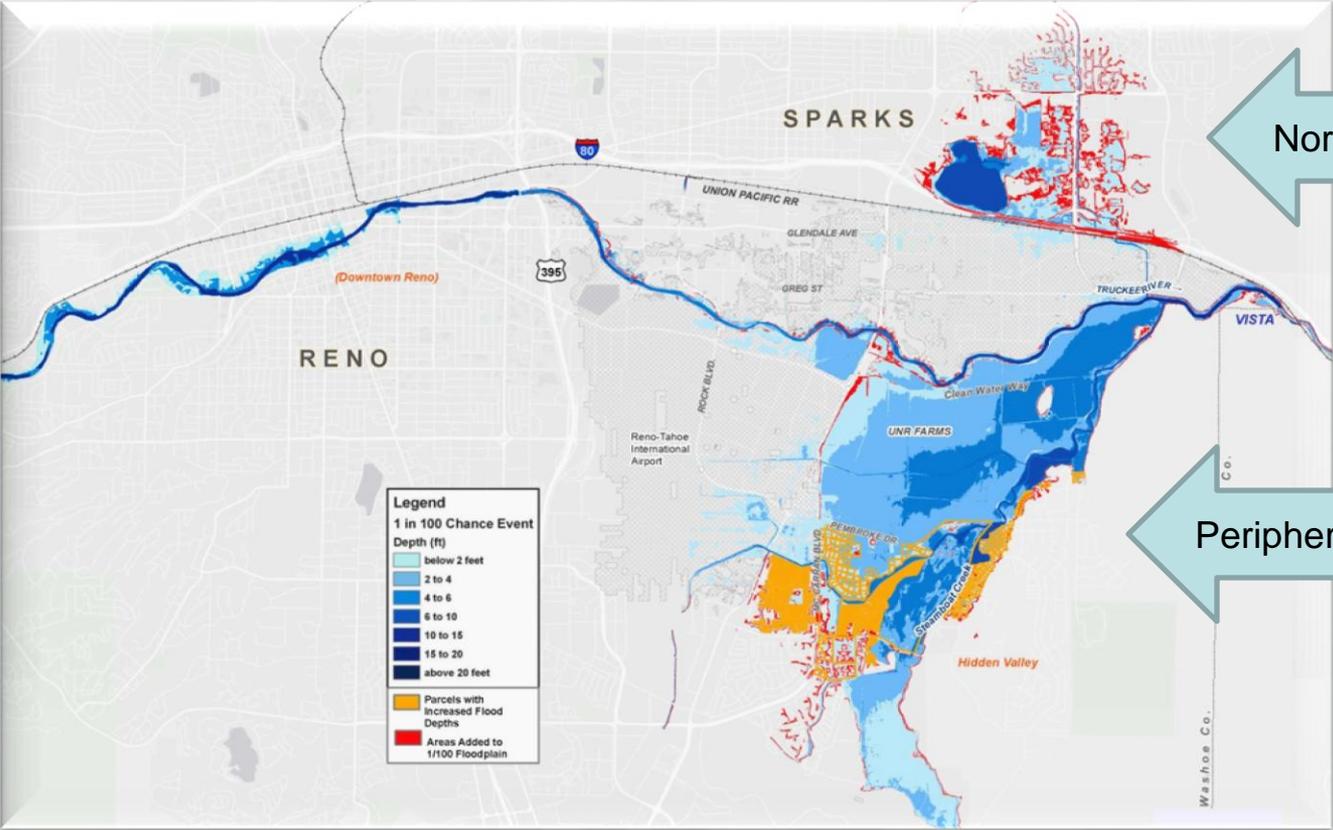
Residual Floodplain (1/100 ACE)



Structures in the Floodplain Total	Without Project	With Project
	1,786	1,307



FEMA National Flood Insurance Program Compliance



Area	Impacts	Least Cost Option
North Truckee Drain Area	Up to 1 foot increase affecting ~240 structures	Pump station
Periphery of UNR Farms	Up to 7 inch increase affecting ~1075 structures	<ul style="list-style-type: none"> Elevate 892 residential structures Floodproof 7 non-residential structures

Recommended Plan Economic Summary

Economic Summary		
Item	NED Plan (\$1,000)	NED Plan with NFIP (\$1,000)
Investment Costs		
First Costs ¹	\$234,891	\$234,891
Associated Cost NFIP Compliance ²	0	195,000
Interest During Construction	22,205	25,828
Total	257,096	455,719
Annual Cost	11,823	20,290
Annual Benefits	25,505	26,524
Net Annual Benefits	13,682	6,234
Benefit to Cost Ratio (3.5%)	2.2	1.3
Benefit to Cost Ratio (7%)	1.3	0.7

¹ Excludes PED sunk costs (\$42,200,000), cultural resources data recovery costs (\$1,817,000), and Section 113 financial costs (\$1,912,000).

² Minimum additional cost for non-Federal compliance with National Flood Insurance Program regulations.



Recommended Plan

Federal and non-Federal Cost Shares

Total Project First Cost: \$280,820,000

(does not include NFIP compliance associated cost)

Project Purposes	Federal	Non-Federal
Flood Risk Management	\$175M	\$94M
Percentages	65%	35%
Recreation	\$5M	\$5M
Percentages	50%	50%
Cultural Resource Data Recovery	\$1.8M	
TOTAL COST-SHARE	\$182M	\$99M



Recommended Plan

Executive Order 11988 Compliance

- 8-step analysis performed; project complies with EO 11988.
- The project does not perform at the 1% level; therefore it doesn't remove development restrictions.
- Restores Fluvial Process



Recommended Plan

Environmental Compliance

- NEPA compliance is complete for CWRB.
 - Received EPA EC-2 rating (Environmental Concerns and Requests Additional Information in FEIS); water resources, air quality, and public health concerns are addressed in the FEIS.
- Section 7 Endangered Species Act Consultation – ESA compliance with USFWS is complete (Lahontan cutthroat trout and cui-ui), 5 December 2013.
- Section 106 National Historic Preservation Act – Programmatic Agreement executed with SHPO on August 23, 2005, amended April 29, 2010.
- Compliant with all applicable Laws, Executive Orders and Federal regulations.
- Government to Government has been undertaken for this study with the Pyramid Lake Paiute Tribe and the Reno-Sparks Indian Colony.



Environmental Operating Principles

1. Foster sustainability as a way of life throughout the organization.
2. Proactively consider environmental consequences of all Corps activities and act accordingly.
3. Create mutually supporting economic and environmentally sustainable solutions.
4. Continue to meet our corporate responsibility and accountability under the law for activities undertaken by the Corps, which may impact human and natural environments.
5. Consider the environment in employing a risk management and systems approach throughout the life cycles of projects and programs.
6. Leverage scientific, economic and social knowledge to understand the environmental context and effects of Corps actions in a collaborative manner.
7. Employ an open, transparent process that respects views of individuals and groups interested in Corps activities.



Environmental Operating Principles Implementation

EOPs are part of our culture:

- Recommended Plan
 - uses a setback levee to avoid impacts to riparian corridor.
 - avoids or minimizes environmental impacts while maximizing future safety and economic benefits to the community.
 - restores floodplain connection and ecological function.
- Worked with local resource agencies during planning phase to minimize impacts to the environment.
- Held multiple stakeholder and public meetings throughout the process to understand public concerns.
- Full Vertical Team integration.



Status of Reviews

- Review Plan Update – Complete (Nov 2012)
- District/Regional Quality Control – Complete (Jul 2013)
- Legal Review – Complete (Jul 2013)
- Agency Technical Review (ATR) – Complete (Jul 2013)
- Risk Analysis Review – Completed (Jul 2013)
- Public and Agency Review of Draft Report – Complete (May-Jul 2013)
- Independent External Peer Review (IEPR) – Complete (Aug 2013)
- Presentation of ATR and IEPR comments to follow
- MCX Cost Certification – Complete 11 Dec 2013



Recommended Plan Review Issues

- District/Regional Quality Control
 - Section 113
- Agency Technical Review
 - Mitigation for induced erosion and induced flooding
 - Levee foundation and seepage design
 - Cost estimate
 - Exclusion of NFIP compliance costs from NED Plan identification
- IEPR Comments
 - 10 comments – 3 high, 6 medium significance, 1 low significance
 - 28 recommendations – 21 adopted and 7 not adopted
 - IEPR concurs with 9 USACE responses; 1 non concur (NFIP)



Recommended Plan

IEPR Non-concur

- Identified by IEPR panel as “High” significance comment
Panel concern – Alternatives were not evaluated using same criteria (cost of NFIP compliance); alternatives may have been eliminated prematurely.
- USACE response – NED is policy compliant in regards to induced damages.
- Panel backcheck – Panel is unable to determine if Alternative 3 would have been identified as the NED Plan if NFIP compliance costs would have been considered for all alternatives.



Project Implementation

- Completed local work eligible for Section 104 credit
 - Approved by ASA(CW) in 2008
 - Reno Sparks Indian Colony project consists of approximately 2,200 linear feet of floodwall/levee on the south bank of Truckee River
 - Estimated credit \$2.4 M

- Pre-construction Engineering and Design: 2 years
- Construction Phase: 5 years
- Plant Establishment Period: 3 years post construction



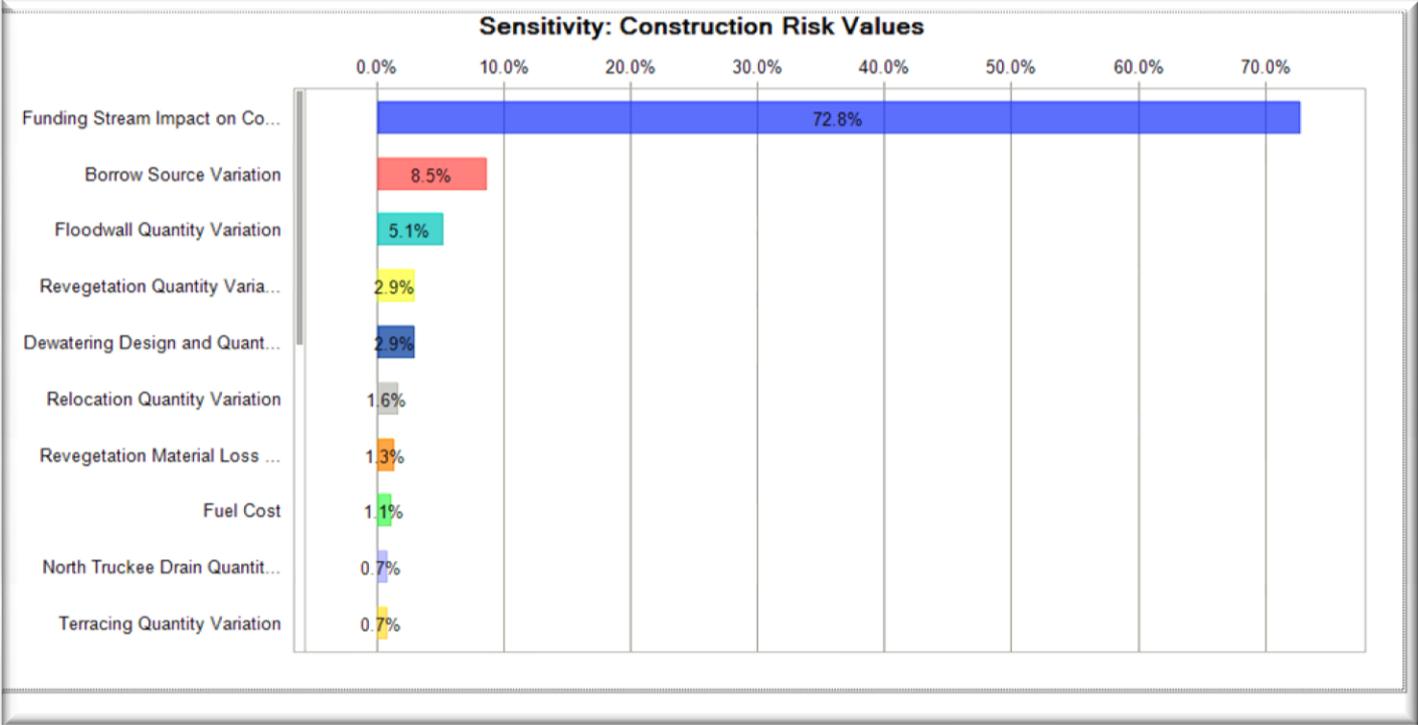
Study Risk Management

- Risk Informed Formulation Process
- Study Risk Register
- Cost Schedule Risk Analysis
- Risk Assessment Memorandum
- Communication and Transparency of Process
- Vertical Team Integration

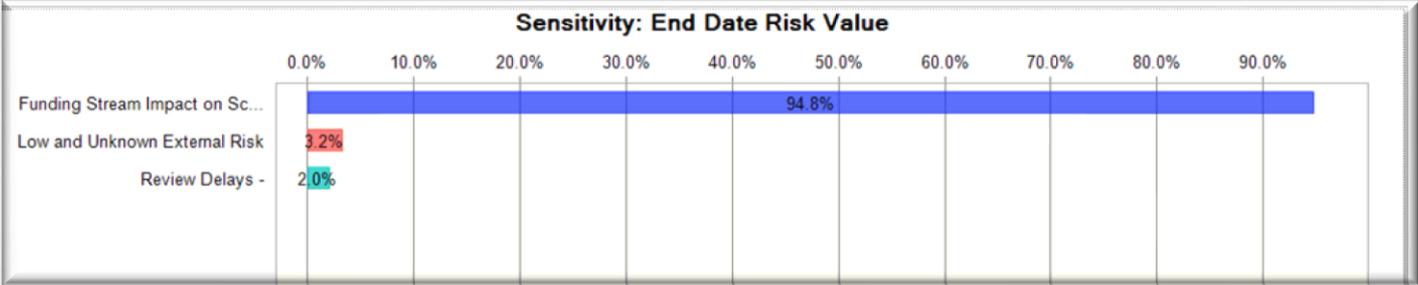


Cost and Schedule Risk Analysis

Cost Sensitivity Analysis



Schedule Sensitivity Analysis



Study Team Members

(SPK/SPL)

- Project Management
- Planning
 - Plan Formulation
 - Environmental
 - Economics
 - Cultural Resources
- Engineering
 - Hydraulics
 - Hydrology
 - Geotechnical
 - Cost Engineering
 - Value Engineering
 - Environmental Engineering
 - Civil Design
- Real Estate
- Review Team
 - DST
 - RIT
 - OWPR
 - ATR
- Sponsor: TRFMA
- Office of Counsel
- Public Affairs Office



Truckee Meadows Schedule

- Feb 2013 – AFB and PGM
- May through August 2013
 - Release Draft GRR/EIS
 - Public Meetings
 - Division Engineers Transmittal Memo
- Dec 2013 – CWRB
- Jan/Feb 2014 – Final Public/State/Agency Review
- Apr 2014 – Chief’s Report
- 2015 – 2016 – PED
- 2017 – 2020 – Construction



District Recommendation

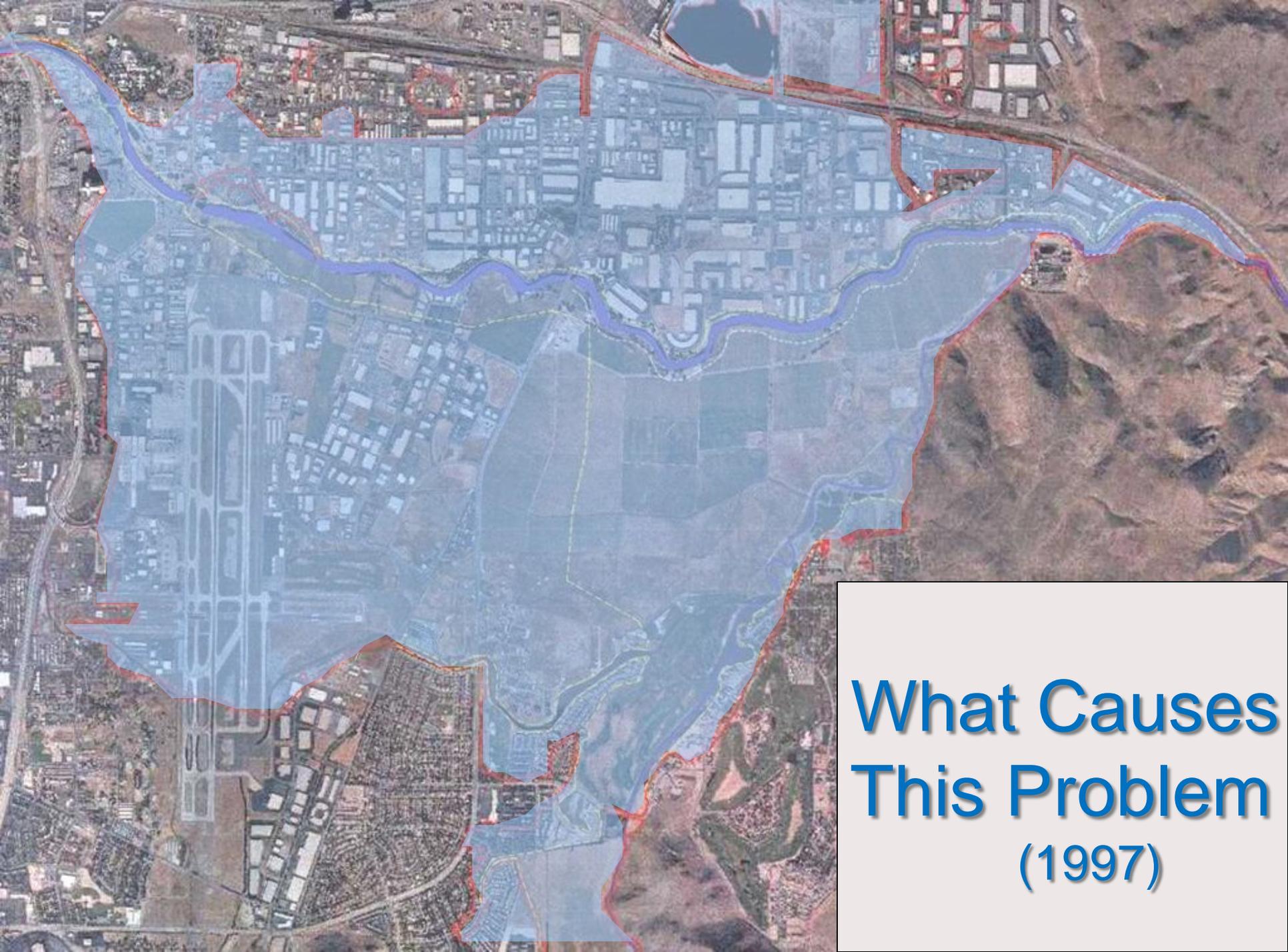
- Release Final Report for State and Agency Review
- Approve Final Report
- Complete Chief's Report



Statements from the Non-Federal Sponsor

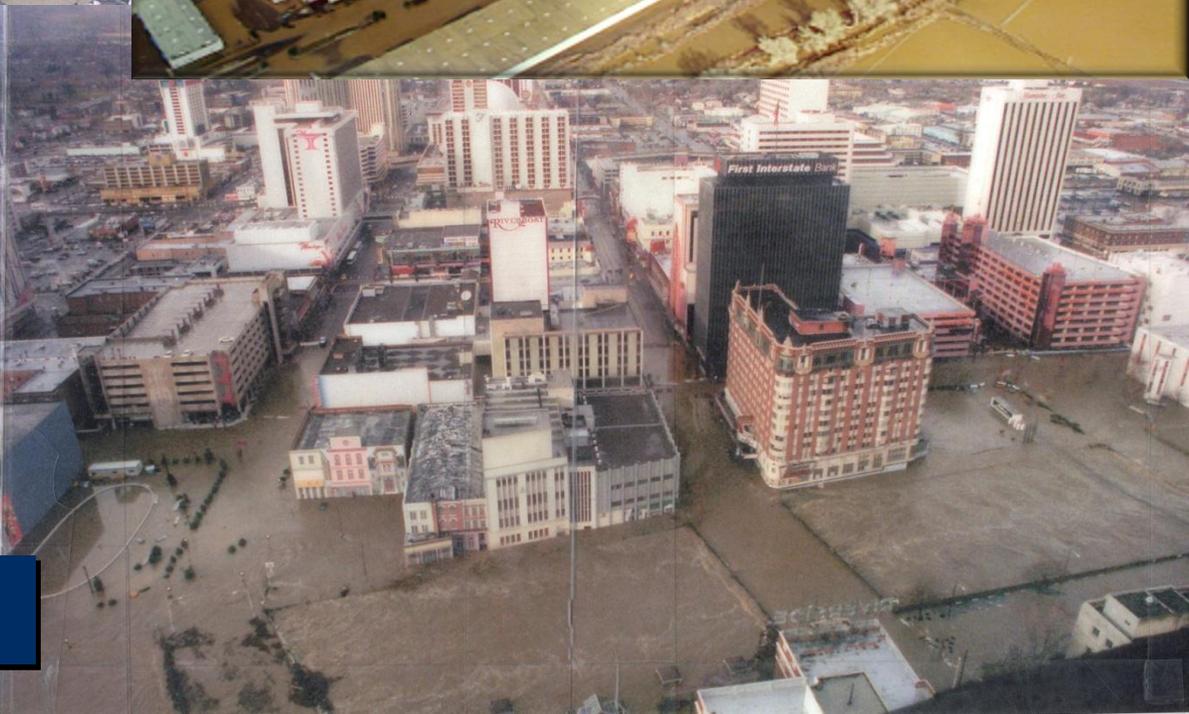
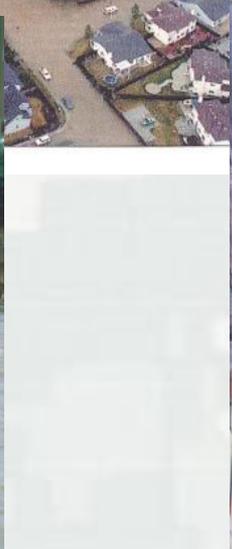
- Truckee River Flood Management Authority (TRFMA)
- Represented by
 - Oscar Delgado (TRFMA Board Member)
 - Jay Aldean (TRFMA Executive Officer)
- Strong community support for study completion as part of the regional strategy





**What Causes
This Problem
(1997)**

Non-Federal Sponsor – The Problem



1997



1950s

Flood of 2005



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Non-Federal Sponsor – The Problem

- This has been a long and difficult process

<u>Date</u>	<u>Peak Flow</u>	<u>Return Freq.</u>	
March 18, 1907	18,500 cfs	90 yr	
January 16, 1909	10,100 cfs	30 yr	
March 26, 1928	18,800 cfs	90 yr	
December 11, 1937	17,000 cfs	80 yr	
November 21, 1950	19,900 cfs	95 yr	
December 4, 1950	11,700 cfs	35 yr	Flood Control
December 23, 1955	20,800 cfs	100 yr	Act of 1954
February 2, 1963	18,400 cfs	90 yr	
December 23, 1964	11,300 cfs	35 yr	
February 17, 1986 **	14,400 cfs	??(50) yr	
January 1, 1997 *	23,200 cfs	117 yr	
December 31, 2005	16,400 cfs	65 yr	



Regional Strategy

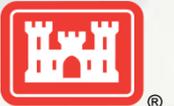
- Critical Importance of a Regional Solution
 - to provide safety to the public
 - to reduce property damages and disruptions
 - to maintain the economy of the region
- USACE Plan Critical to Regional Strategy

Potential loss of industry,
jobs and tax revenue to the
Region



Non-Federal Sponsor – Local Action

- Formed Regional Agency – Truckee River Flood Management Authority
- Flood fee
- Continued participation in NFIP
- Advanced land purchases
- Actively planning and building projects
- Non-structural activities
- Committed to ecosystem restoration



Non-Federal Sponsor – Local Action Virginia Street Bridge Replacement



Non-Federal Sponsor – Local Action Indian Colony Floodwall & Levee



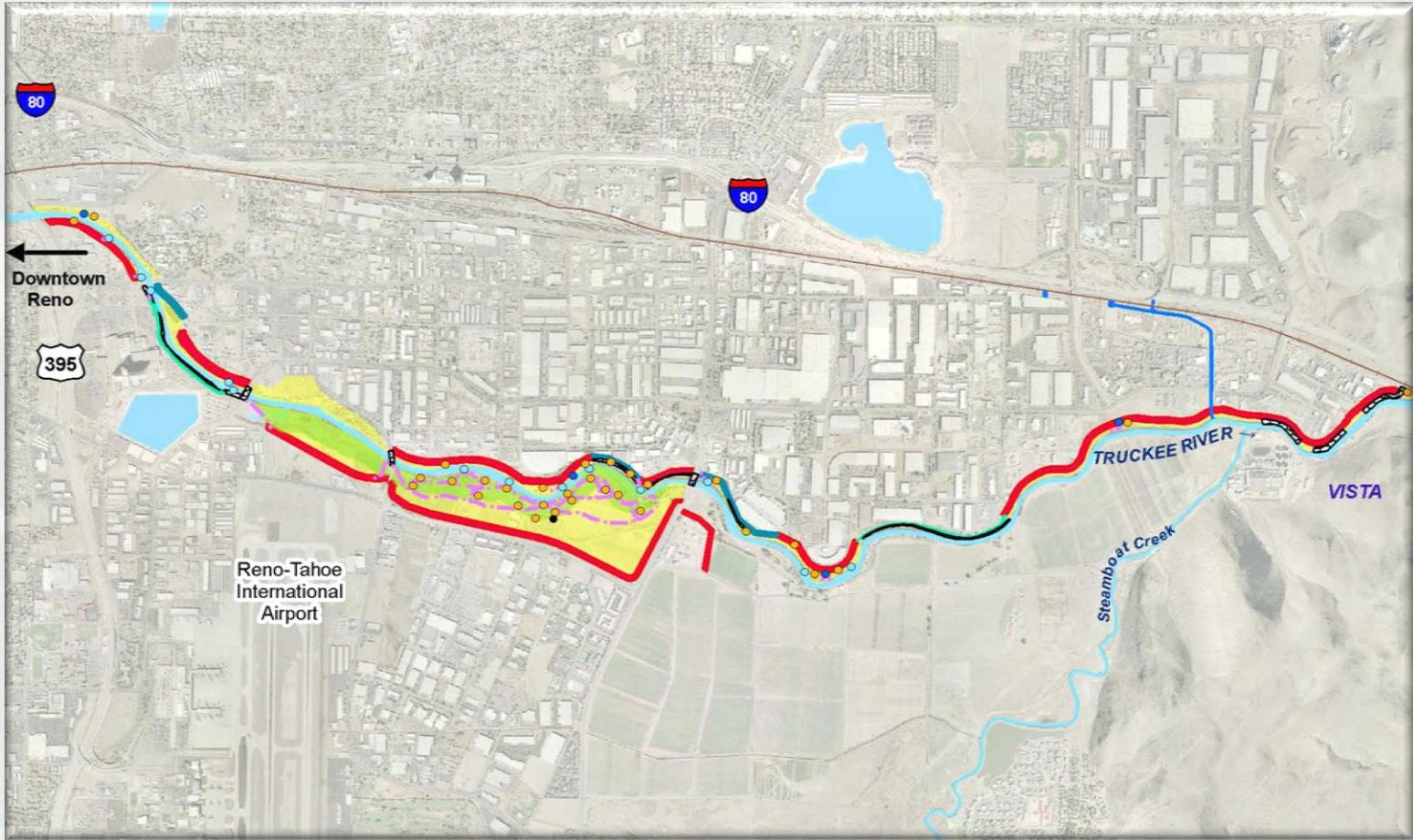
Public-Private Partnership:

- *Reno-Sparks Indian Colony*
- *State of Nevada Department of Corrections*
- *Walmart*
- *Flood Project*
- *Received Section 104 Credit Approval*

Non-Federal Sponsor – Local Action River Parkway Land Acquisition



Non-Federal Sponsor Statement of Support



Truckee Meadows, Nevada Flood Control Project General Reevaluation Report and EIS

Civil Works Review Board Briefing

BG C. David Turner
Commander
South Pacific Division

17 December 2013



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Briefing Objectives

- Rationale for Support
- Quality Assurance, Policy and Legal Compliance Review
- Independent External Peer Review
- Expected Response to Draft Report of Chief of Engineers
- Division Recommendation



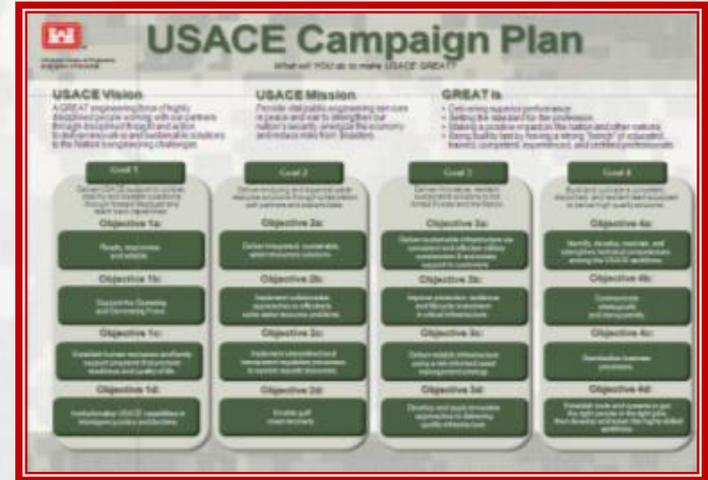
Rationale for SPD Support

- Recommended Plan is a significant positive step for improved flood risk management for the City of Sparks, NV
- Recommended Plan based on the National Economic Development (NED) Plan
- Division Engineer's Transmittal Letter signed 9 Dec 2013
- Report complies with all applicable policy & laws
- The recommended plan is technically sound, economically feasible, and environmentally acceptable
- The recommended plan is supported by the Sponsors, Congressional delegation, and the Public

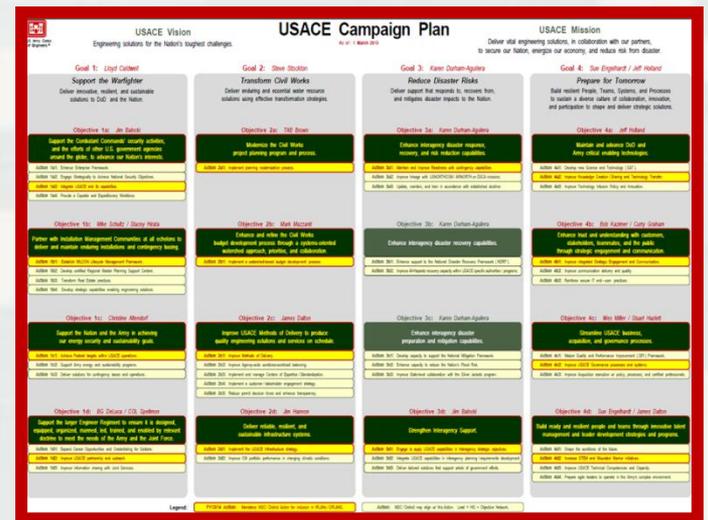


Rationale for SPD Support: USACE Campaign Plan

- FY11:
 - ▶ Objective 2a: Deliver Integrated and Sustainable Water Resource Solutions: Recommended plan provides positive FRM outputs
 - ▶ Objective 2b: Collaborative Approaches: Collaboration with agencies and stakeholders
 - ▶ Objective 4a: Identify, Develop, Maintain, Strengthen Technical Competencies: Worked with sub-COPs on complex issues, presented papers.
 - ▶ Objective 4b: Communicate Strategically and Transparently: Public workshops and Vertical Team involvement



- FY13-18:
 - ▶ Objective 2a: Modernize the Civil Works Project Planning Process; Implement Planning Modernization: Legacy study executing during transformation applied critical thinking to uncertainty and level of detail required. Full Vertical Team Integration



SPD Quality Assurance, Policy & Legal Compliance Review

- **Agency Technical Review (ATR)** by team comprised of members from CEPOA, CESPL, CESP; completed 25 July 2013; All ATR comments have been resolved
- **Cost Certification:** ATR and certification of total project cost baseline by Walla Walla District Cost Engineering Mandatory Cost Center of Expertise; completed 11 December 2013
- **Independent External Peer Review (IEPR)**
 - IEPR is complete; 10 comments including 27 recommendations; 21 adopted, 6 not adopted; 1 Non-concur for Comment #2.
 - A Review plan for PED will be submitted for MSC approval and will contain IEPR Type II Safety Assurance Review
- **Policy Review:** Review of Policy Guidance Memo: All policy compliance issues have been resolved
- **Legal review** by SPK District Counsel completed 25 July 2013; SPD Division Counsel Legal review completed 2 August 2013



Policy Issues

- Compliance with FEMA's National Flood Insurance Program
- Crediting for lands, easements, and rights-of-way pursuant to Section 113 of EWDAA 2006
- EO11988 Wise use of floodplains: Recommendation complies, does not result in induced development



IEPR Agency Response: 1 Non-Concur

- Issue: IEPR Comment #2 – *High Significance* – **Truckee Meadows Reach Alternatives 1 and 2 were not evaluated using the same criteria as Alternative 3 and may have been eliminated prematurely**
- Analysis: USACE Response: Not adopted
 - ▶ IEPR concerned USACE did not take into consideration costs for compliance with National Flood Insurance Program (NFIP) requirements when screening alternatives to identify the NED plan
 - ▶ The GRR identifies \$195 million in associated economic costs for NFIP compliance by the non-Federal sponsor for the Recommended Plan
 - ▶ Current policy is that NED plan identification should *not* include NFIP compliance costs.
 - ▶ Due to lack of specific written the reviewer could not concur
 - ▶ Proposed final written Agency Responses to the issues raised and recommendations in IEPR report coordinated with vertical team and FRM Planning Center of Expertise
- Recommendation: Agency position documented in Feasibility Report is policy compliant and informally coordinated with ASA(CW) staff



Expected Response to Draft Report of the Chief of Engineers

- Expectations are a favorable response to draft Chief's Report
- Recommendation supported by non-Federal Sponsors
- Collaboration with the Vertical Team, resource agencies, and stakeholders was integrated throughout study process



Division Recommendation

- Release Final Report for State and Agency Review
- Approve Final Report
- Complete Chief's Report



Truckee Meadows, Nevada

General Reevaluation Report and EIS

Agency Technical Review Concerns

Mr. Bruce Sexauer, Alaska District
ATR Chairperson, Flood Risk
Management Planning Center of
Expertise

14 Nov 2013



US Army Corps of Engineers
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Agency Technical Review (ATR)

- Mr. Bruce Sexauer, Alaska District
ATR Chairperson, Flood Risk Management Planning Center of Expertise



Agency Technical Review

- Review led by POA with reviewers from LRH, NWO, POA, SPL, SPN
- AFB submittal reviewed November, 2012
- Draft submittal reviewed May, 2013
- All comments resolved and closed
- Cost Estimates reviewed and certified by Cost Engineering Center of Expertise
- Cost estimate certified July, 2013
- Cost Estimate re-certified September, 2013
- Final ATR certified July, 2013
- No additional review required for final, no significant revisions to draft final report



ATR Issues

- AFB Review - Four issues commented upon required significant coordination to resolve; induced erosion, induced flooding, levee foundation and seepage design, and the cost estimate.
- Draft Review - Issues of mitigation for induced erosion, mitigation for induced flooding, and the cost estimate were again raised and resolved. Exclusion of NFIP compliance costs from NED Plan identification was resolved based on HQUSACE guidance.



ATR Issues (cont)

- Final Review - Concerns raised during this review were clarification of specific details and unresolved comments on cost estimate previous review.



ATR Lessons Learned

- AFB
 - ATR team agreed to begin review of the main report chapter by chapter to keep the project on schedule. This tactic did not work well and contributed to a lack of consistency within the report and its appendices. Lesson learned was to have a work product completed prior to beginning ATR.
 - Part of 3x3x3 is to limit the amount of technical data (i.e. boring logs) submitted as part of the report. However, the PDT still needs to make this additional information available to reviewers to ensure the recommendations are technically sound.



ATR Lessons Learned (cont)

- Draft Review
 - More coordination between the District and the Cost MCX during the ATR process would be beneficial. The comments provided were those necessary to obtain a Cost Certification, typically something done at the time of the final report.
- Final Review
 - The District schedule for ATR, back check, and certification (one week total) was not achievable. Regardless of end suspense, more time is required.



Independent External Peer Review (IEPR)

Truckee Meadows Flood Control Project, Nevada General Reevaluation Report

Presented to the CWRB on
December 17, 2013



Battelle

Karen Johnson-Young, PMP
Program Manager

Lynn A. McLeod, PMP
IEPR Project Manager



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IEPR – Truckee Meadows

Panel Members

Panel Discipline

Danny Maher (Lead Panel Member)	Economics
Gary Freeman, P.E., Ph.D.	Hydraulics/Hydrologic Engineering
Charles J. Newling, PWS, CWB	Biology/Ecology
C. Deane Fowler, P.E., PgMP, CCM	Civil/Construction Engineer
R. William Rudolph, P.E.	Geotechnical Engineer

IEPRs were conducted in August/September 2011 and July/August 2013

- Under the first IEPR, the Panel participated in a site visit and reviewed the July 2011 version of the project; Final report submitted October 2011
- Under the second IEPR, the same Panel reviewed the May 2013 version of the documents
- During the second IEPR, the Panel reviewed the FPCs from the first IEPR to determine if they had been addressed in the May 2013 version of the review documents.



IEPR – Truckee Meadows

Final IEPR Report submitted on August 22, 2013 based on second review findings

Results:

- 10 Final Panel Comments
 - 3 high significance
 - 6 medium significance
 - 1 low significance

Post-Final Panel Comments/Response results documented on September 12, 2013

Results:

- Project Delivery Team (PDT) Evaluator Responses to Final Panel Comments
 - 6 concurs
 - 4 non-concurs
- Panel BackCheck Responses to the PDT Responses
 - 9 concurs
 - 1 non-concur



IEPR – Truckee Meadows

Notable Panel Findings from the Final IEPR Report

- Based upon ER 1105-2-100, National Flood Insurance Program compliance costs should have been taken into consideration for Alternatives 1, 2, and 3 when identifying the National Economic Development (NED) Plan.
- The economic benefits of the Truckee Meadows project cannot be validated due to incomplete economic risk and uncertainty analysis.
- The net benefits for the NED plan cannot be validated due to inconsistencies in construction cost contingency rates for the project confidence level.
- The estimated annual costs of operating and maintaining project components seem very low given the scope of the NED plan.
- Potential chronic impacts to the aquatic ecosystem due to sedimentation over the extended period of project construction and bank stabilization have not been described.



IEPR – Truckee Meadows

Conclusion

- The Panel concurred with all but one of the PDT Responses to the Final Panel Comments.
 - The Panel's non-concur is based on an ER 1105-2-100 requirement that the National Economic Development (NED) costs are to include all costs needed to achieve the benefits claimed during the period of analysis. Although the GRR presented complete benefit-cost analysis results for Alternative 3, without and with National Flood Insurance Program (NFIP) compliance costs, the benefit-cost analysis results for Alternatives 1 and 2 were presented only without the NFIP compliance costs. In addition, NFIP compliance costs for Alternatives 1 and 2 were not provided separately within the documents. The Panel's position is that the benefit-cost analysis results for Alternatives 1 and 2 should have been calculated with the NFIP compliance costs, and that the NED Plan should then have been determined using Alternatives 1, 2, and 3 based on complete benefit-cost analysis results that included the NFIP compliance costs for all three alternatives.



HQUSACE REVIEW CONCERNS

Civil Works Review Board

Truckee Meadows, Flood Control Project, Nevada

Jeremy LaDart

Office of Water Project Review

Planning and Policy Division

Washington, DC – 17 December 2013



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HQUSACE Team Reviews:

- FSM was held June 1998
- Reset Meeting was held October 2010
- Formulation Workshop was held November 2011
- AFB was held February 2013
- Review of Draft Report completed
- Back check of remaining outstanding comments completed December 2013
- Final GRR/EIS HQUSACE review completed



Significant HQ Comments

- Economic Justification
- Recreation Features
- LER Crediting (Section 113)
- NFIP Compliant Induced Damage Mitigation
- EO 11988 compliance



Economic Justification

CONCERN: The tentatively selected plan presented in 2011 did not show all increments being justified. For example, the Downtown Reno Reach. There were also questions about overall justification.

REASON: Economic justification for the overall plan and separable elements must be demonstrated for Federal Investment (ER 1105-2-100 Planning Guidance Notebook).

RESOLUTION: A Formulation workshop was held in November 2011 in Sacramento with all levels of the vertical team and the sponsor. The workshop result was the recommended plan which is justified both incrementally and overall.

RESOLUTION IMPACT: Concern Resolved.



Non-Compliant Recreation Features

CONCERN: The tentatively selected plan presented in 2011 included some recreation features that could not be cost shared.

REASON: The Planning Guidance Notebook (ER 1105-2-100 Exhibit E-2) defines specific features that may be cost shared by USACE.

RESOLUTION: The non-compliant recreation features were removed and the recreation component of the recommended plan is policy compliant.

RESOLUTION IMPACT: Concern Resolved.



LER Crediting (Section 113)

CONCERN: The recommended plan must comply with Section 113 of the Energy & Water Development Appropriations Act of 2006 when estimating credit to the sponsor for Lands, Easements and Rights-of-way.

REASON: Section 113 requires that all LER expenses be credited based on amounts actually spent by the sponsor rather than USACE standard practice of fair market value.

RESOLUTION: The report was revised to show how LER crediting will be handled to be compliant with Section 113.

RESOLUTION IMPACT: Concern Resolved.



NFIP Compliant Induced Damage Mitigation

CONCERN: The recommended plan is expected to induce flood damages in several downstream areas. The induced damages must be mitigated under FEMA requirements, but do not meet USACE cost sharing requirements.

REASON: USACE guidance allows for cost sharing if there is: 1) a takings determination, 2) economic justification of the mitigation, and/or 3) an overriding social concern. In addition to USACE guidance, FEMA guidance requires full mitigation for changes to Base Flood Elevation (BFE) and a map revision is required.

RESOLUTION: The PDT followed USACE guidance. The NFIP compliant mitigation costs were estimated and are 100% sponsor cost. The plan is justified even with the NFIP costs.

RESOLUTION IMPACT: Concern Resolved.



E.O. 11988 Compliance

CONCERN: Recent reporting requirements for EO 11988 have not met Administration standards.

REASON: Recent Chief's Reports sent to OASACW for review have generated concerns about EO 11988 compliance and documentation.

BASIS FOR CONCERN: Final report will document E.O. 11988 requirements per recent OASA(CW) guidance regarding the Jordan Creek project.

RESOLUTION IMPACT: Concern Resolved.



HQUSACE POLICY REVIEW TEAM RECOMMENDATION

**Release the GRR and EIS for State &
Agency Review.**



General Lessons Learned

- + Early and frequent vertical team involvement eg. FEMA NFIP compliance
- + Vertical Integration facilitates SMART Planning execution – Planning Charette.
- △ Balance sponsor/public interests with moving Federal project forward; scalable objectives
- △ Comprehensive implantation guidance for project specific legislation needed.



Division Lessons Learned

- + Reset, project pause, and resulting scope limit led to completion
- + Over-the-shoulder MSC quality assurance review worked really well, allowing us to deliver a higher quality product on a tight timeline
- + Critical use of Risk Assessment tools
- △ Future focus on scalable ecosystem restoration objectives
- △ Cost estimate recertification cycle. Recommend: Original cost estimate be certified and final cost estimate just before Board
- △ Need to capture IEPR comments trends and Charge to IEPR needs to include current policy application

