**DEPARTMENT OF THE ARMY**
**U.S. ARMY CORPS OF ENGINEERS**
**441 G STREET, NW**
**WASHINGTON, DC 20314-1000**

CECW-SPD

JUN 2 2 2016

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

SUBJECT: Rio de Flag, Flagstaff, Arizona Limited Reevaluation Report

1. Purpose. To provide for your review and approval of the enclosed Final Rio de Flag, Flagstaff, Arizona Limited Reevaluation Report (LRR). The report documents the need to increase the authorized project cost from $54,100,000 (October 2006 price level) to $100,837,000 (October 2015 price level).

2. Post Authorization Change. This LRR presents a revised cost estimate and updated economic analysis of the authorized project in order to request authorization of a new project cost. The increase in cost is needed to continue engineering and design, and complete construction. The LRR does not include any new plan formulation and there are no changes in the project location, purpose, or scope. Remaining features of the project cannot be implemented until the new project cost is authorized so as not to exceed the current Section 902 limit. The current total project first cost estimate is $100,837,000 (October 2015 price level). The current Section 902 limit for the Rio de Flag Project is $81,025,000 million (October 2015 price level).

3. National Economic Development (NED) Plan. The Recommended Plan is the NED Plan, which is supported by the city of Flagstaff (non-federal sponsor).

4. Project Authorizations.

a. Section 101(b)(3) of the Water Resources Development Act of 2000 (WRDA 2000), Public Law 106-541, authorized *"Rio de Flag, Flagstaff, Arizona – The project for flood damage reduction, Rio de Flag, Flagstaff, Arizona, at a total cost of $24,072,000, with an estimated federal cost of $15,576,000 and an estimated non-federal cost of $8,496,000."*

b. Section 3007 of the Water Resources Development Act of 2007 (WRDA 2007), Public Law 110-114, reauthorized *"The project for flood damage reduction, Rio de Flag, Flagstaff, Arizona, authorized by section 101(b)(3) of the Water Resources Development Act of 2000 (114 Stat. 2576), is modified to authorize the Secretary to construct the project at a total cost of $54,100,000, with an estimated federal cost of $35,000,000 and a non-federal cost of $19,100,000."* The WRDA 2007 project modification did not add new project features.

5. Status of Project Construction. The project is currently in the construction phase. To date, the Clay Avenue Wash Detention Basin, Butler Avenue Tunnel and Thorpe Bridge have been constructed.

6. Economic Evaluation. The authorized project remains economically justified under the increased total project cost estimate. At October 2015 price levels, and based on a 3.125 percent discount rate and 50-year period of analysis, the project has equivalent annual benefits of $7,763,000 and equivalent annual costs of $4,282,000. Equivalent annual net benefits total $3,481,000, and the updated benefit/cost ratio is 1.81 (with a remaining benefit/remaining cost ratio of 1.78).

7. Environmental Considerations. There are no unresolved environmental considerations associated with the authorized project. The first National Environmental Policy Act (NEPA) document for the Rio de Flag, Flagstaff, Arizona Project was an Environmental Impact Statement with a signed Record of Decision, dated 19 December 2002, that accompanied the 29 December 2000 Report of the Chief of Engineers. Since then, there have been two supplemental Environmental Assessments and Findings of No Significant Impacts were completed in April 2004 and February 2009. The existing NEPA documents for the project have been reviewed and they adequately identify the environmental impacts of the project.

8. Conclusions. The Los Angeles District prepared the LRR in accordance with ER 1105-2-100, Appendix G, dated, 30 June 2004, to document the increases in the project cost and recommend an increase in the authorized project cost. The Cost Engineering Mandatory Center of Expertise Agency Technical Review was completed and certified on 14 April 2016. The HQUSACE policy compliance review of the LRR concluded that there are no unresolved policy issues and that the project is technically sound, environmentally acceptable, and economically justified.

9. Recommendations. I recommend the enclosed LRR be transmitted to Congress as a basis for increasing the authorized project cost of the Rio de Flag, Flagstaff, Arizona Project to $100,837,000 (October 2015 price levels). Documents necessary to coordinate this recommendation with the Office of Management and Budget will be developed in coordination with your staff and provided under separate cover.

Encl

STEVEN L. STOCKTON, P.E.
Director of Civil Works