



South Mountain Transportation Corridor Study

Citizens Advisory Team
Technical Report Summary

Draft Jurisdictional Waters

Why study jurisdictional waters in the Environmental Impact Statement (EIS)?

During the 1970s, a growing public concern for uncontrolled polluting of America's waterways led to enactment of what would come to be known as the Clean Water Act (CWA). The Act established the structure for regulating discharges of pollutants into the waters of the United States. Waters of the United States are also referred to as 'jurisdictional waters'.

Over the years, the definition of 'jurisdictional waters' has become more complex. For purposes of presentation in this summary *only*, jurisdictional waters are navigable waters, related tributaries, and adjacent wetlands. These waters are regulated for the purposes of navigation and commerce, among other reasons. Section 404 of the Clean Water Act is one section of the Act that regulates what can be placed in jurisdictional waters. Under Section 404, the project proponent must obtain a permit from the U.S. Army Corps of Engineers (USACE) to discharge materials into or dredge materials out of jurisdictional waters. Various levels of permitting are allowed based upon the level of activity to occur in the jurisdictional waters and the value of the waters themselves. Simply, the greater the activity to occur in waters considered to be important, the greater the degree in complexity in the permitting process and the ability to gain permit approval.

The placement of structures such as bridge embankments, bridge piers and abutments, and culverts would be activities potentially discharging materials into jurisdictional waters. For the purposes of the EIS, the study team determines if jurisdictional waters are within the Study Area and if so, how the proposed freeway alternatives might affect jurisdictional waters in accordance with the requirements set forth in Section 404.

What kind of impacts would occur from construction?

A project like the South Mountain Freeway could require the placement of structures such as bridge embankments, bridge piers and abutments into jurisdictional waters leading to the discharge of dredged or fill material into the Salt River.

A project like the South Mountain Freeway could also cross ephemeral washes (washes that have water only during and for a short period following precipitation). In some instances, these washes may be channelized to control stormwater runoff and directed toward culverts allowing such waters to cross under the freeway.

Are there jurisdictional waters that could be affected by the South Mountain Freeway?

There are two areas where jurisdictional waters could be affected (Figure 1).

- The Salt River would be considered jurisdictional waters. The jurisdictional boundaries would be considered the 'ordinary high water mark', commonly thought of as the distinct riverbank demarcation.
- On the south side of South Mountain, there are over 50 ephemeral washes that the freeway would potentially cross along the E1 Alternative.



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How do the alternatives differ in construction-related impacts?

The alternatives and options in the Western Section would have similar potential impacts to jurisdictional waters, as shown in the table below. These impacts would be related to the Salt River crossing. The E1 Alternative would potentially affect ephemeral washes on the south and southwest side of South Mountain. Some of these ephemeral washes may need to cross under the freeway in a common conveyance culvert rather than individually. Temporary construction zones may have additional impacts.

Alternative	Salt River Potential Jurisdictional Waters Encroachment (acres) ^a	Ephemeral Washes Potential Jurisdictional Waters Encroachment (acres) ^a
Western Section Alternatives		
W55	21.6	N/A
W71	18.3	N/A
W101WPR	22.9	N/A
W101WFR	22.9	N/A
W101CPR	22.9	N/A
W101CFR	22.9	N/A
W101 EPR	22.9	N/A
W101EFR	22.9	N/A
Eastern Section Alternative		
E1	N/A	3.5
N/A: Not Applicable		

^aPotential actual impacts would be less and limited to pier placements

What kinds of freeway operational impacts (post-construction) would occur?

Once the project is constructed and open to use, no further discharge of dredged or fill materials is anticipated. The Arizona Department of Transportation will obtain a permit in accordance with the requirements of Section 404. The permit will outline specific measures to be undertaken to ensure no further degradation (such as increased erosion or water quality degradation) of jurisdictional waters would occur as a result of the project. Details of the mitigation plan associated with the permit will be presented in the Final EIS and further refined during the final design process for the selected alternative.

The bridge structure across the Salt River would generate runoff into the river. Whether this flow is directly drained into the river, or will flow into a settlement basin before discharge into the river, will be determined during final design through coordination with the USACE and the City of Phoenix.



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How do the alternatives differ in operational-related impacts?

There are no substantial differences in the magnitude or types of impacts.

What if the project was not constructed?

With no action, there would be no direct impacts on any jurisdictional waters; however, continued growth throughout the Study Area would likely contribute to ongoing impacts on jurisdictional waters.

Are there any specific and/or unique impacts from the build alternatives?

For a project of the magnitude of the South Mountain Freeway, there are no unique impacts anticipated. However, the U.S. Army Corps of Engineers and the City of Phoenix are looking at ways to help restore flood conveyance, habitat, and recreational values to the Salt River. The project, known as the Rio Salado Oeste, encompasses jurisdictional boundaries of the Salt River. The U.S. Army Corps of Engineers and City officials are aware of the freeway project and believe it would bring beneficial effects to their project. ADOT has agreed to work with Rio Salado Oeste planners in coordinating the two projects.

Are there things that could be done to reduce or avoid impacts?

The alternatives have been evaluated for avoidance specific to jurisdictional waters and ADOT has determined that complete avoidance is not possible. Minimization will be implemented through alternatives analysis and mitigation. Compensation measures will be implemented to account for impacts that cannot be avoided. In the Eastern Section, in some locations, bridges would be constructed instead of box culverts (as originally planned) to avoid impacts on jurisdictional waters and to allow for wildlife movement.

To help ensure water quality impacts are minimized, ADOT will prepare a water quality certification application in accordance with Section 401 of the Clean Water Act as part of the Section 404 permitting process. The application will be submitted for review and approval by the Arizona Department of Environmental Quality (ADEQ). ADEQ will review the Section 404 permit for compliance with water quality standards and will determine that the project is in compliance with ADEQ policies and Section 401 of the Clean Water Act of 1977 (33 U.S.C. 1251). ADOT will comply with specific conditions of the CWA Section 401 certification.

What can be done to reduce construction impacts?

Section 402 National Pollutant Discharge Elimination System (NPDES) of the Clean Water Act requires that ADOT, or its contractor, obtain a permit before beginning construction.

The permit requires that a Stormwater Pollution Prevention Plan (SWPPP) be prepared. The plan will include what are known as Best Management Practices for controlling construction related pollution discharge. Some of the types of practices ADOT could employ to reduce impacts in the floodplains during construction include:



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- Constructing silt barriers
- Insuring construction equipment is in good working order
- Creating sediment basins
- Using controlled equipment fueling and maintenance areas
- Ensuring proper disposal of potentially contaminated materials
- Limiting vegetation removal and soil disturbance
- Seeding and mulching exposed slopes immediately after construction
- Ensuring existing flows of existing canals and irrigation water

ADOT will develop a specific SWPPP during the final design efforts for the project.

What can be done to reduce jurisdictional waters impacts once the freeway is operating?

Section 404 permitting mitigation requirements will be followed post-construction. Measures will be presented in the Draft EIS and finalized during the final design process after the EIS process is completed.

Are the conclusions presented in this summary final?

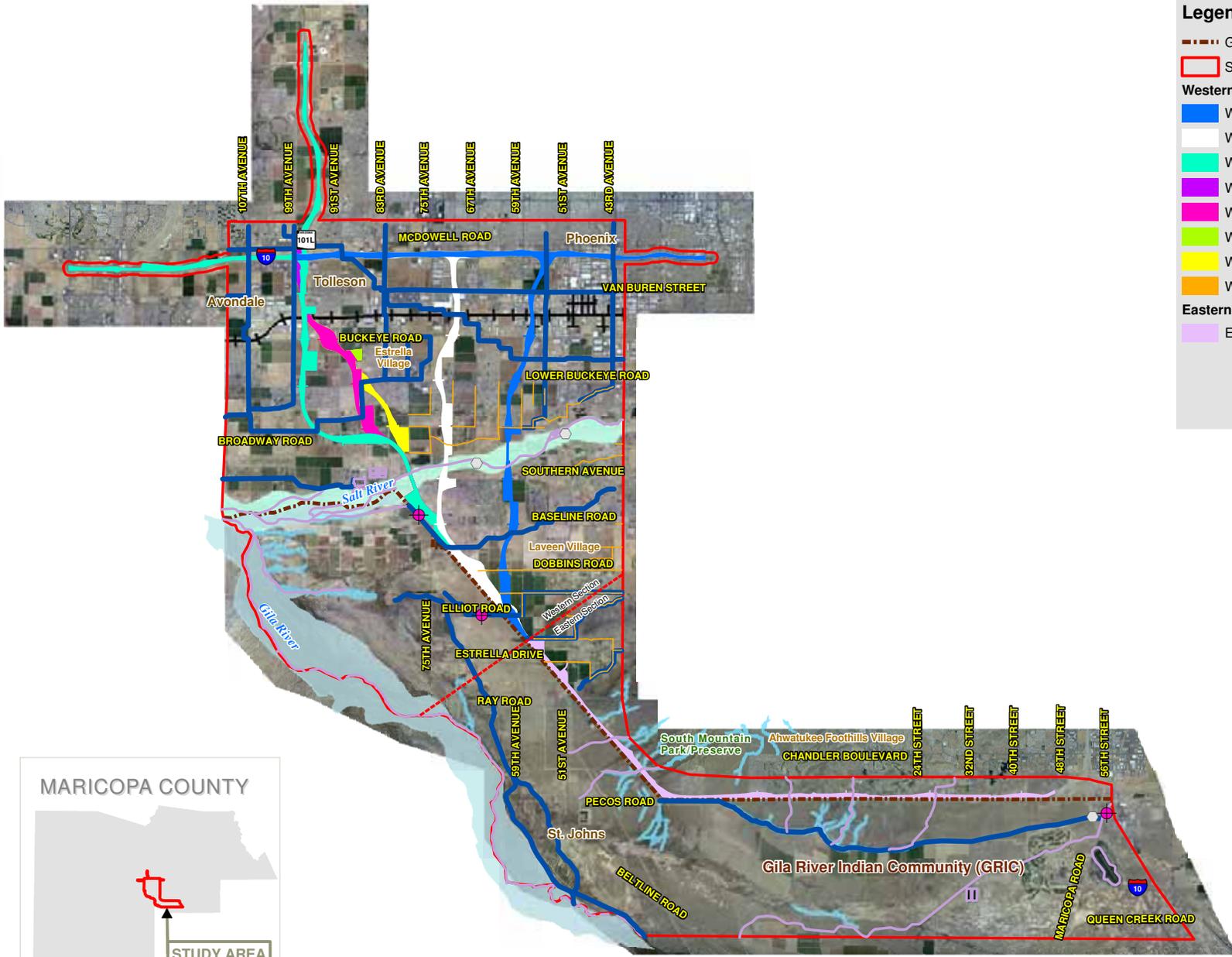
It is quite likely that quantitative findings relative to impacts are subject to change. The reasons for future changes which will be presented to the public during the Draft EIS, Final EIS and Final Design stages are based on the following:

- Refinement in design features through the design process.
- Updated aerial photography as it relates to rapid growth in the Western Section of the Study Area.
- On-going communications with the City of Phoenix regarding measures to minimize harm to South Mountain Park/Preserve.
- On-going communications with the Gila River Indian Community (GRIC) in regards to granting permission to study action alternatives on GRIC lands.
- Potential updates to traffic forecasts as updated regularly by MAG.
- Potential updates with regards to the special 2005 survey to augment the 2000 Census.
- As design progresses, cost estimates for construction, right-of-way acquisition, relocation and mitigation will be updated on a regular basis.

However, even with these factors affecting findings, it is anticipated the affects would be equal among the alternatives and consequently impacts would be comparatively the same. This assumption would be confirmed if and when such changes were to occur.

As a member of the Citizens Advisory Team, how can you review the entire technical report?

The complete technical report is available for review by making an appointment with Mike Bruder at 602-712-6836 or Mark Hollowell at 602-712-6819.



Legend

GRIC Boundary	Storm Water Outfall
Study Area	SRP Irrigation Drain
Western Section Alternatives	
W55	Railroad
W71	SRP Canal Lateral
W101WPR	Canal
W101WFR	Wash
W101CPR	Salt River
W101CFR	Gila River
W101EPR	Ephemeral Wash
W101EFR	
Eastern Section Alternative	
E1	

0 6,000 12,000 Feet
1 inch equals 12,000 feet

N



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South Mountain Freeway
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Aerial Photography Date: April 2006

Figure 1