

## PRIME AND UNIQUE FARMLANDS

### AFFECTED ENVIRONMENT

An assessment of prime and unique farmlands (see sidebar for definitions of prime and unique farmlands) impacts was conducted to comply with the Farmland Protection Policy Act (FPPA) (7 C.F.R. § 658). The FPPA, administered by the Natural Resources Conservation Service (NRCS), states that “the purpose of the Act is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses.” In addition, the FPPA states that federal programs shall be administered in a manner that, as practicable, would be compatible with State and local government and private programs and policies to protect farmland.

### Existing Prime and Unique Farmlands

The presence of prime and unique farmlands in the Study Area was determined using the most current soil survey data (U.S. Department of Agriculture 1977) and aerial mapping to identify irrigated farmland with soil types that support prime and unique farmlands (NRCS 2007).

It is important to note that prime farmland and agricultural land (as identified in the *Land Use* section) are not necessarily the same. The agricultural land use designation is a product of local community planning efforts, while the prime farmland designation is a product of NRCS criteria such as soil type and availability of irrigation. Most of this land is located in the Western Section of the Study Area, with the Eastern Section acreage being located near 51st Avenue and Carver Road.

In general, Study Area agricultural land, including land under consideration as prime farmland, has been converted to other uses (e.g., residential, commercial, industrial developments) as planned and approved by local municipalities (see section, *Developments Plans*, on page 4-7, regarding the conversion of agricultural land). As such, this land has been and is projected to be a diminishing resource.

### Criteria for Determining Farmland Impact

The Farmland Conservation Impact Rating is used to determine the relative impact of projects on land regulated by the FPPA. Land that receives a combined score of 160 points or more from the Land Evaluation and Site Assessment (LESA) criteria is protected by the Act. The U.S. Department of Agriculture recommends that sites receiving scores totaling 160 or more be given increasingly higher levels of consideration for protection (7 C.F.R. § 658.4). If the LESA score is less than 160 points, the land need not be given further consideration for protection and no additional sites need to be evaluated. This land is, thus, not considered “farmland” as defined by the FPPA. The LESA score for action alternatives is determined by completing the NRCS-CPA-106 form, “Farmland Conversion Impact Rating for Corridor Type Projects.” The NRCS-CPA-106 form, containing scoring for the proposed action, is in Appendix 4-5, beginning on page A579.

The LESA scoring system is a two-component, numerical rating system that measures the quality of farmland based on land evaluation and corridor assessment criteria. The land evaluation criterion (Part V of the NRCS-CPA-106 form) is used to assign a score of between 0 and 100 to groups of soil types based on their productivity and capability to support most types of crops. This portion is customarily completed by NRCS. The corridor assessment criteria (Part VI of the NRCS-CPA-106 form) is used to assign a score of between 0 and 160 to farmland within the Study Area based on multiple criteria that assess the suitability of each alternative for protection as farmland (7 C.F.R. § 658.5). NRCS has completed appropriate sections of the NRCS-CPA-106 form. ADOT has completed both Parts III and VI of the form to obtain scores.

The instructions that accompany the NRCS-CPA-106 form and 7 C.F.R. § 658.5(c) were used for guidance to complete the assessment portion, Part VI.

Procedurally, for projects where the value of Part VI is 60 points or more, the NRCS-CPA-106 form is forwarded to NRCS. NRCS is required by the FPPA to respond within 45 days. Where the LESA score (determined by combining results from Parts V and VI) is 160 points or greater, alternatives to avoid farmland impacts would be discussed with NRCS. If avoidance of farmland impacts would not be possible, measures to minimize or reduce the impacts would be evaluated.

### ENVIRONMENTAL CONSEQUENCES

The types of environmental impacts expected as a result of the proposed action are:

- ▶ **direct conversion** – actions or projects that result in making land nonfarmable (an action on a specific area results in a direct impact)
- ▶ **cumulative** – may include isolation of remnant parcels (agricultural land that is bisected by a project such as a highway, resulting in two isolated parcels) (see section, *Secondary and Cumulative Impacts*, beginning on page 4-167)
- ▶ **secondary** – taking land adjacent to a specific impact area out of agricultural production (see section, *Secondary and Cumulative Impacts*, beginning on page 4-167)

### All Action Alternatives, Western and Eastern Sections

All action alternatives would directly affect prime farmland by conversion. Depending on farm ownership and plot size, farmland not directly affected by R/W acquisition could become too small for continued economic use and be eliminated from further usefulness as farmland. An agricultural parcel that would be bisected by the proposed action and would become isolated parcel islands is an example of farmland that could become too small for continued economic use. In addition, on bisected parcels, farm equipment may have to be transported by the existing road network to gain access to agricultural land on opposite sides of the freeway.

### Prime and unique farmlands

“Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Prime farmland includes land that possesses the above characteristics, but is being used to produce livestock and timber. It does not include land already in or committed to urban development or water storage.” [7 C.F.R. § 658.2]

“Unique farmland is land other than prime farmland that is used for production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods. Examples of such crops include citrus, tree nuts, olives, cranberries, fruits, and vegetables.” [7 C.F.R. § 658.2]

The action alternatives would not affect any wetlands that may be associated with agriculture (see June 14, 2002, letter from NRCS in Appendix 1-1, page A45).

**Action Alternatives, Western Section**

All Western Section action alternatives would convert agricultural land to a transportation use. The overall contribution of the conversion of agricultural land to nonfreeway-related uses would be negligible (see section, *Secondary and Cumulative Impacts*, beginning on page 4-167). Table 4-49 provides the acreage of prime and unique farmlands, by action alternative, that would be directly converted to nonagricultural uses.

In the Western Section, the W71 Alternative would convert the least amount of farmland to a transportation use.

Table 4-49 also summarizes the results for the impact rating analysis from the NRCS-CPA-106 form for the action alternatives in the Western Section. The LESA scores (Parts V and VI combined) for most action alternatives in the Western Section are at least 160 points. If an action alternative were to become the Selected Alternative, the NRCS-CPA-106 form should be resubmitted to NRCS for final evaluation and signature. If the returned scores remained 160 points or greater, technical assistance would, at that time, be requested from NRCS.

**Action Alternative, Eastern Section**

The E1 (Preferred) Alternative would convert agricultural land to freeway-related uses. Table 4-49 summarizes the total acreage of prime and unique farmlands to be directly converted and presents results for the impact rating analysis, from the NRCS-CPA-106 form, for the E1 Alternative.

The LESA score (Parts V and VI combined) for the E1 Alternative is less than 160 points. The score for the E1 Alternative must, however, be considered with the score for any of the action alternatives in the Western Section; therefore, NRCS technical assistance would be requested for the action alternatives in both the Western and Eastern Sections.

**Table 4-49** Farmland Conversion Impact Rating, Prime and Unique Farmlands, Western and Eastern Sections

Action Alternative/ Alignment Option	Total Acreage to be Converted Directly (Part <sup>a</sup> III)	Impact Rating (Part V) Points	Impact Rating (Part VI) Points	LESA <sup>b</sup> Score
<b>Western Section</b>				
W59	588	86	74	160
W71	583	86	74	160
W101 Western Option	827-851	86-87	74	160-161
W101 Central Option	917-841	82-84	74	156-158
W101 Eastern Option	739-863	88	74	162
<b>Eastern Section</b>				
E1	154	89	16	105

<sup>a</sup> “Part” refers to the U.S. Department of Agriculture’s Natural Resources Conservation Service’s (NRCS) NRCS-CPA-106 form “Farmland Conversion Impact Rating for Corridor Type Projects,” completed by NRCS in April 2011.

<sup>b</sup> Land Evaluation and Site Assessment

Implementation of the E1 Alternative would cause no conversion of agricultural uses on Community land.

**No-Action Alternative**

Without the proposed action, the conversion of land from agricultural use to residential, commercial, and industrial uses is projected to continue. Because of the projected long-term urban growth of the Phoenix metropolitan area, farmland in the Study Area would continue to be lost through conversion to urban uses.

**MITIGATION**

**ADOT Right-of-Way Group Responsibilities**

During the design phase, ADOT would implement a R/W acquisition program in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (49 C.F.R. § 24) (see section, *Displacements and Relocations*, beginning on page 4-39, for additional information regarding this law).

During the design phase of the proposed action, ADOT would coordinate with affected property owners as part of the R/W acquisition process to provide access, if possible, for farm equipment between

divided agricultural parcels or to purchase remaining farm parcels considered too small to be farmed either economically or functionally.

**ADOT District Responsibility**

Farmland mitigation would include provision for access to farmland otherwise made functionally inaccessible by the project (FPPA Part 523.52 Exhibit C – Glossary). Additional mitigation measures may be considered based on NRCS guidance.

**CONCLUSIONS**

Congress enacted the FPPA to minimize the extent to which federal programs contribute to unnecessary and irreversible conversion of farmland to nonagricultural uses and to ensure that federal programs are administered in a manner that, to the extent practicable, are compatible with State, local government, and private programs and policies to protect farmland. Implementation of each of the action alternatives would be considered a federal action and each would convert farmland to a transportation use.

The W71 Alternative would convert the least amount of farmland to transportation use. Farmland conversion to a

transportation use would increase with the more westerly action alternatives. Consequently, the W101 Alternative would have the greatest impact on farmland. Additional factors should be considered when reaching such a conclusion:

- ▶ The W59 Alternative is the most eastern of the Western Section action alternatives and, as planned, would closely follow the freeway alignment as it has been planned for over 20 years. Unlike with the W71 and W101 Alternatives, much of what has been planned along the W59 Alternative is commercial and industrial uses (more compatible with a freeway use).
- ▶ Urbanization is rapidly moving in a westward direction. By the time freeway construction would begin (if an action alternative were to become the

Selected Alternative), it is likely that farmland acreage converted to transportation use for the westernmost alternatives would be less than now reported because such land would likely have already been converted from agricultural use to residential, commercial, and/or industrial uses, although some remnants of farmland may remain (see the section, *Development Plans*, on page 4-7, regarding the planned urbanization occurring in the Western Section).

- ▶ When considered as acres of farmland converted per freeway mile, impacts would be relatively comparable among action alternatives, with the exception of the W59 and W71 Alternatives, for reasons described in the respective sections.

Placed in context, the impacts on prime and unique farmlands from implementation of the proposed action, regardless of action alternative, would be negligible. Further, farmland impacts among action alternatives in the Western Section would be inconsequential in differentiating among the action alternatives.

Under the No-Action Alternative, no project-related impacts on farmlands would occur; continuing urban development would, however, result in the cumulative loss of farmland in the region, although some remnants of farmland would likely remain.