

# Technical Memorandum



**To:** Big Chino Valley Stakeholders  
**From:** Marissa Gifford, HDR and Nancy Craig, HDR  
**Project:** Big Chino Valley Pumped Storage Project  
**Date:** 10/18/2018  
**Subject:** Aesthetic and Visual Resources Study - Proposed Key Views

## 1.0 Introduction

The Big Chino Valley Pumped Storage Project (the Project) is located in Yavapai, Coconino and Mohave Counties, Arizona, and Clark County, Nevada. The Project will provide energy storage and grid stabilization services in the southwestern United States through the operation of two reservoirs (Lower and Upper reservoirs) using variable-speed pump-turbines to store and generate power. Project reservoirs will occupy approximately 450 acres of lands currently used for grazing. The two reservoirs will be situated in basins formed by excavating and enclosing valleys with dams. In addition to the proposed dams and reservoirs, other above-ground features include new access roads, safety and security features, and water conveyance structures.<sup>1</sup> Elevations at the Project reservoirs range between 5,300 feet and 6,600 feet above sea level. Lands at the Project reservoirs location are largely undeveloped, supporting a variety of desert, shrub, and canyon habitats.

ITC is conducting an Aesthetic and Visual Resources assessment following the study methods presented in the Big Chino Valley Pumped Storage Project (FERC No. 14859) Visual & Aesthetic Resources study plan dated March 21, 2018. This memorandum identifies proposed key views for the study.

## 2.0 Project Viewshed and Proposed Key Views

A digital terrain model based on topography was used to determine the Project reservoirs viewshed. The viewshed extends in an approximately 15 miles radius around the Project reservoirs. Information on land ownership, roadways, and recreation areas was reviewed to identify representative locations for key views. Satellite and ground-level imagery review of vegetation and landforms which may obstruct views (along with distance from the study area) were used to identify proposed key views.

Proposed key views are representative of the range of views potentially affected by the Project. These representative views were selected to catalog baseline conditions and will be used to assess the visual impacts of the Project reservoirs and associated structures.

Selecting key views is intended to capture the existing visual character and visual quality of the landscape. Key views were selected at various distances from the Project reservoirs to provide representative views. See Table 1 for the name, location, and a description of proposed key views. Table 1 also identifies the affected populations, specifying the affected viewer group. Figure 1

---

<sup>1</sup> Up to three new transmission corridors for grid connection are planned as part of the Project; transmission routes are currently being developed. Visual resources associated with the Project's transmission components will be assessed in a separate study effort during 2019.

identifies the proposed key views. Photos 1-4 depict existing views from each location, looking towards the Project area.

**Table 1. Description of Proposed Key Views**

#	Name	Location	Description	Viewer-Groups
1	Route 66	Along Route 66 in Seligman (at milepost 141)	<ul style="list-style-type: none"> <li>• View of Project area looking SE</li> <li>• Approx. 7.3 miles from study area</li> <li>• Potential view of upper reservoir</li> <li>• AADT for Route 66 in Seligman: 3,119 in 2018</li> </ul>	<ul style="list-style-type: none"> <li>• Tourists and Recreationists</li> <li>• Motorists</li> </ul>
2	I-40	Along I-40 eastbound (east of milepost 132)	<ul style="list-style-type: none"> <li>• View of project area looking SW</li> <li>• Approx. 1 mile from study area</li> <li>• Potential view of upper reservoir</li> <li>• AADT for location not available</li> </ul>	<ul style="list-style-type: none"> <li>• Tourists and Recreationists</li> <li>• Motorists</li> </ul>
3	Big Chino Valley Rd	At the intersection of Big Chino Valley Rd/ Big Chino Wash Rd	<ul style="list-style-type: none"> <li>• View of project area looking NW</li> <li>• Approx. 1.4 miles from study area</li> <li>• Potential views of access roads and lower reservoir</li> </ul>	<ul style="list-style-type: none"> <li>• Residents</li> </ul>
4	Williamson Valley Rd	Near intersection of Williamson Valley Rd and Crooked Horse Trl	<ul style="list-style-type: none"> <li>• View of project area looking E/NE</li> <li>• Approx. 3 miles from study area</li> <li>• Potential views of access roads and lower reservoir</li> </ul>	<ul style="list-style-type: none"> <li>• Tourists, Recreationists, and Residents</li> </ul>

AAADT – Annual Average Daily Traffic (Source: ADOT, <https://www.azdot.gov/planning/DataandAnalysis/average-annual-daily-traffic>)

### 3.0 Next Steps

ITC invites stakeholder input into the location of the key views. Photographs have been taken from proposed key views to support the assessment (see Photos 1-4). Simulations of Project features will be developed from the key views, analyzed, and presented in a study report that will be provided to stakeholders in December 2018.



**Photo 1: Key View 1, looking SE towards Project**



**Photo 2: Key View 2, looking SW towards Project**



**Photo 3: Key View 3, looking NW towards Project**



**Photo 4: Key View 4, looking E/NE towards Project**