

## **8.0-1 INTRODUCTION**

Construction and operation of the Water for the Future Program may result in permanent or temporary significant adverse impacts that are unavoidable. Unavoidable significant adverse impacts are defined as those that meet the following two criteria:

- There are no reasonably practicable mitigation measures to eliminate the impacts; and
- There are no reasonable alternatives that would meet the purpose and need of the action, eliminate the impact, and not cause other or similar significant adverse impacts.

For the Water for the Future Program, unavoidable significant adverse impacts—to the extent they can be identified at this time—are summarized in this chapter for Project 1, Shaft and Bypass Tunnel Construction, Project 2B, Bypass Tunnel Connection and RWBT Inspection and Repair, including Wawarsing, and future operation of the tunnel after repairs. These predicted unavoidable temporary significant adverse impacts are based on the analyses and conclusions reported in Chapter 2 through Chapter 6 of this EIS.

While Chapter 3, “Project 2A, Water Supply System Augmentation and Improvement,” Section 4.3, “Project 2B Effects from Reducing Leakage,” Section 4.4, “Project 2B Effects from Tunnel Unwatering,” Section 4.5, “Project 2B Effects from Reservoir Drawdown,” and Section 4.6, “Project 2B Effects of Releases,” provide a generic assessment of potential effect from implementation of Project 2A and additional potential effects that may occur from implementation of Project 2B, a determination of unavoidable significant adverse impacts from these later potential actions cannot be made at this time. As described in Chapter 1, “Program Description,” DEP will undertake a second EIS or a subsequent environmental review, as appropriate, that will provide further details on Projects 2A and 2B and will quantitatively assess the potential impacts resulting from Project 2A and 2B of the proposed program.

A detailed assessment of potential impacts associated with construction of Project 1 and 2B at the west and east connection sites was undertaken; Project 1 and 2B construction is expected to result in temporary significant adverse impacts on traffic (both east and west of Hudson study areas), noise (both east and west of Hudson study areas) and neighborhood character (east of Hudson study area near the east connection site). As described below, in some cases these temporary significant adverse impacts could not be fully mitigated.

## **8.0-2 NEIGHBORHOOD CHARACTER**

During construction, as described in detail in Section 2.3, “Neighborhood Character,” and Section 4.2, “Project 2B Probable Impacts of Physical Construction,” the changes to visual character as well as the increases in traffic, lighting, and noise would temporarily adversely affect the neighborhood character near the east connection site. Residences immediately surrounding the construction site would experience increased activity and light, along with temporary significant adverse noise impacts from construction of Project 1 and 2B. Therefore, near the east connection site, construction of Project 1 and 2B is expected to result in a temporary significant adverse impact on neighborhood character. However, this impact to neighborhood character would be temporary and would not be expected to result in disruptions to neighborhood character once construction is complete. Since these temporary adverse impacts could not be fully mitigated, the impact on neighborhood character in the east of Hudson study area near the east connection site from the construction of Project 1 and 2B would be an unavoidable temporary significant adverse impact.

---

## **8.0-3 TRANSPORTATION**

As described in the assessment of transportation impacts in Section 2.10, “Transportation,” and Section 4.2, DEP examined the potential off-site traffic impacts from the expected construction activities in each phase, and undertook evaluations of a range of potential measures to eliminate or reduce those impacts. Section 2.19, “Mitigation,” and Section 4.2 details mitigation measures for the traffic impacts identified for both the west and east of Hudson study areas. Mitigation analyses have been prepared to develop measures that would restore traffic conditions (lane group and/or approach delays) and level of service (LOS) to future without Project 1 and 2B levels or better. These measures were developed for peak construction periods, and would address potential impacts not just for both peak but also the full duration of the construction of Project 1 and 2B. Where it has not been practical to identify mitigation that would return service conditions to the future without Project 1 and 2B traffic conditions, measures have been identified that would reduce the predicted impacts from Project 1 and 2B.

As discussed Section 2.19 and Section 4.2, mitigation measures would reduce temporary impacts from Project 1 and 2B construction traffic at the intersection of Route 9W and Fostertown Road during the AM and PM peak hours but would not fully mitigate the impact. Therefore, this impact is an unavoidable temporary significant adverse impact from the construction of Project 1 and 2B.

---

## **8.0-4 NOISE**

As described in the assessment of noise impacts in Section 2.13, “Noise,” and Section 4.2, DEP examined the potential off-site noise impacts from the expected construction activities in each phase, and undertook evaluations of a range of potential measures to eliminate or reduce those impacts. As a

result, for both the west of Hudson and east of Hudson study areas, all practical noise control methods would be incorporated into the Conceptual Noise Mitigation Plan in Appendix 2.19-2 and DEP's contract specifications. The remaining temporary significant adverse noise impacts at residents adjacent to both connection sites could not be fully mitigated, and are identified as unavoidable temporary significant adverse impacts from the construction of Projects 1 and 2B. \*