

4.15 PUBLIC SERVICES AND UTILITIES

4.15.1 Summary of Environmental Consequences

The only significant effect anticipated for any alternative is related to traffic impacts during the construction of the concentration ponds. Approximately 1,000 truck trips per day are anticipated on SR 86, using a traffic control system to stop vehicles on the highway. This would cause significant delays, the severity of which would depend on the timing of the deliveries.

No other significant impacts to public services or utilities are anticipated. The amount of water required for constructing the concentration ponds and EES would be minimal. Wastewater services for the construction effort would be provided by portable facilities. Electrical services for the construction effort would be provided by portable generators. Materials dredged from the project site for constructing concentration ponds would be discharged to the Sea. A minimal amount of other construction debris would be generated. Salts accumulated at the EES would be disposed of in the Sea or at an approved landfill. The amount of salts disposed of at local landfills is expected to be minor.

The construction of concentration ponds and Enhanced Evaporation Systems would cause commute trips for construction workers between their homes and the work sites. These new trips added to existing traffic patterns would change the LOS as would vehicle trips associated with the construction. Heavy construction vehicles hauling borrow material, precipitating salts, and roadway construction materials would affect the levels of service on two-lane roads and at intersections. The impacts would be more significant on roadway grades.

The construction of haul roads, pipelines, and boatramp access roads would cause temporary closures and detours when borrow materials cross SR 86, when a pipeline is built under SR 111, and when access roads are resurfaced or reconstructed.

A small number of construction workers and their families would move to the project area temporarily. However, this is not expected to generate significant population growth or significant demand for local utility services or public service providers.

4.15.2 Significance Criteria

The following criteria have been used to evaluate the significance of impacts to utilities:

- The degree to which the increased demands from the proposed program would require the development of additional capacity or new facilities;
- The degree to which increased demands from the proposed program would reduce the reliability of utility service or transportation systems or would aggravate existing adverse conditions; and
- The degree of damage to underground utilities that could be caused by construction or operation activities.

The following criteria have been used to evaluate the significance of impacts on public services:

- The degree to which traffic related to the proposed project would increase traffic volumes in relation to roadway capacity, resulting in a reduction in the LOS;
- The degree to which increases in population related to the proposed project would reduce service levels of police and fire services below locally prevailing conditions or would require additional personnel or facilities that are not expected to be available;
- The degree to which increases in population would reduce public education service levels below legally mandated student-to-teacher ratios.

4.15.3 Assessment Methods

Utilities

The utility demands have been determined based on estimated construction and operation needs of the proposed restoration alternative (direct demand). In addition, projected area population and recreational use increases related to the construction and operation of the restoration alternative have been considered (indirect demand). The utility systems addressed in the analysis would be the facilities and infrastructure used for potable water (pumping, treatment, storage, and distribution), wastewater (collection and treatment), solid waste facilities, and electricity generation and distribution.

The potential effects of restoration alternatives have been evaluated by estimating and comparing the additional direct and indirect demand associated with each alternative to the existing and projected operating capabilities of each utility system.

Public Services

Traffic. The analysis of potential impacts to traffic focuses on roadways that provide direct access to the project site and on regional links to the Salton Sea area. The ROI for the transportation analysis includes major highways in Riverside and Imperial counties, with emphasis on the area surrounding the Salton Sea.

The number of vehicle trips expected as a result of the proposed restoration alternative has been estimated for construction and operation scenarios. Estimated vehicle trips have been allocated to the local road network using expected destinations and sources for trips. The transportation network has been examined to identify potential impacts to LOS.

Public Education, Police Protection, and Fire Protection. Projected increases in demand for public services are based on population increases. Increases in population would affect school enrollments and would require fire protection and police services from local providers.

4.15.4 No Action Alternative

No significant impacts on public services or utilities are expected with either the No Action Alternative with continuation of current inflow conditions or with the No Action Alternative with reduced inflows. With both scenarios, existing demands on public services and utilities would continue, and there would be no project-related demand on these systems. As the Sea declines, recreational use and the demands associated with it would decrease. No significant impacts are anticipated for water resources with reduced inflows because the proposed transfer program would transfer conserved water and would not reduce the amount of water available for water service in the project area.

Effect of No Action Alternative with Continuation of Current Inflow Conditions

With the No Action Alternative, existing demands on public services and utilities would continue. There would be no project-related demand, and increases in demand related to increased recreational uses and economic development would not occur. As the Sea declines, recreational use and the commercial enterprises that support this recreational use would decrease, resulting in decreased local demand for utilities and public services.

Effect of No Action Alternative with Reduced Inflows (1.06 maf/yr)

The effects of the No Action Alternative with Reduced Inflows would be the same as those discussed for the No Action Alternative with current inflows for all utilities and public services except for water. However, no significant impacts are expected for water service in the project area because the proposed water transfer program would transfer conserved water and would not reduce the amount of water available for water service in the project area.

4.15.5 Alternative 1

Traffic delays related to truck traffic crossing Highway 86 using a traffic control device would be significant. The effects of Alternative 1 with current inflow conditions on all other utilities and public services would not be significant. Alternative 1 with reduced inflow conditions would result in slightly larger construction impacts.

Effect of Alternative 1 with Current Inflow Conditions

Utilities

Water Service. Short-term, construction-related impacts on water service provided by the IID and CVWD would be less than significant. As discussed in the socioeconomics section, the local labor force would not be sufficient to provide all of the construction labor required for this project. Workers and their families would move to the area for the 48-month construction period. This small increase in demand would not cause significant stress on the local water supply. No significant increase in recreational use of the Sea is expected during Phase I of this alternative. Therefore, demand for water related to recreational uses would remain at current levels.

Approximately 38,000 gallons per day of water would be used during the construction period. This water would be obtained from either the Sea or the local water supply. The water required would be approximately 0.15 percent of the total water demand for IID in 1997. Therefore, a less than significant impact would occur.

Wastewater Service. Wastewater services for the construction effort would be provided by portable facilities. Therefore, no impacts would occur on local wastewater systems. The small number of construction workers and their families that would temporarily move to the project area would connect to the appropriate wastewater system or septic sewer. No significant effects are anticipated from this minor temporary increase in population. No significant increase in recreational use of the Sea is expected during Phase I of Alternative 1. Therefore, demand for wastewater service related to recreational uses would remain at current levels.

Electrical Service. Electrical services for the construction effort would be provided by portable generators. The demand for electricity would be minimal and would be generated by the operation of various construction equipment. The small number of construction workers and their families that would temporarily move to the project area would not cause a significant increase in the demand for electrical service. No significant increase in recreational use of the Sea is expected during Phase I of Alternative 1. Therefore, demand for electricity related to recreational uses would remain at current levels.

Operation of the evaporation ponds and the Pupfish Pond entails pumping water from the Salton Sea into the impoundments. The demand for electricity is expected to be minimal; however, these estimates will be refined in the final design phase.

Solid Waste Disposal Facilities. Materials dredged from the project site would be discharged to the Sea and would not affect local landfills. A minimal amount of other construction debris would be generated during the construction period and would be hauled to a designated landfill.

Public Services

Traffic. There would be impacts to SRs 78, 86, and 111 as construction workers commute from Brawley and other nearby communities to the construction sites. As part of the pond construction, borrow material would be hauled on a dedicated road that runs parallel and west of SR 86. The material would cross SR 86 at two locations with the aid of a traffic control system, which would disrupt traffic flow on SR 86 during the 48-month construction period. Because an average of 1,000 daily truck trips is estimated, this would cause significant delays on SR 86. No increase in recreational use of the Sea is expected over the operation of this alternative. Therefore, traffic related to recreational uses would remain at current levels.

Public Education. The small number of construction workers and their families that would temporarily move to the project area would not cause a significant increase in the number of school-age children.

Police Services. Police services in the project area would be provided by the Imperial County Sheriff's Department. Basic security measures, such as installing fencing and lighting, locking equipment, and providing security patrols should minimize any attractive nuisances at the construction site. No significant impacts on police services are anticipated. No significant increase in recreational use of the Sea is expected during Phase I of Alternative 1. Therefore, demand for police services related to recreational uses would remain at current levels.

Fire Services. Fire services in the project area would be provided by the Imperial County Fire Department and Office of Emergency Services. Permanent structures related to the concentration ponds would be earthen and would not result in an increase in fire hazard. No significant impacts are anticipated. No significant increase in recreational use of the Sea is expected during Phase I of Alternative 1. Therefore, demand for fire services related to recreational uses would remain at current levels.

Effect of Alternative 1 with Reduced Inflow Conditions (1.06 maf/yr)

Reduction of inflows to 1.06 maf per year would result in the same impacts. Impacts to traffic could be greater. These impacts would be related to the construction of the north wetland habitat and the displacement dike. Fill material for the north wetland habitat may be carried on the existing highway system. Material for the displacement dike would be carried on a dedicated haul road that extends south on the west side of SR 86. A traffic control system will facilitate trucks crossing the highway at a point approximately 45 kilometers from the borrow site near the southern boundary of the Sonny Bono National Wildlife Refuge. The proposed water transfer program would transfer conserved water and would not reduce the amount of water available for water service in the project area.

Operational demand for electricity would increase with the additional pumping for the North Wetland Habitat. This increase is expected to have minimal impact on electrical services; however, these estimates will be refined in the final design phase.

Workers and their families would move to the area for the 48-month construction period. This small, temporary increase in demand would not cause significant stress on local utilities or public services. No significant increase in recreational use of the Sea is expected during Phase I of this alternative. Therefore, demand for utilities and public services related to recreational uses would remain at current levels.

4.15.6 Alternative 2

High-power lines and towers would need to be relocated with this alternative. With mitigation, no significant impact is expected. No other significant impacts are anticipated with any other public service or utility. Impacts would be the same for current inflow and reduced inflow conditions.

Effect of Alternative 2 with Current Inflow Conditions

Water Service, Wastewater Service, Electrical Service, and Solid Waste Disposal Facilities. The construction-related impacts for the EES north of Bombay Beach

would be similar to those described for the concentration ponds and would not be significant. High-power (240-kV) lines and towers traverse the site and would need to be relocated. With mitigation, no significant impact is anticipated. Salts accumulated during the enhanced evaporation process would be disposed of on the site. Therefore, local landfills would not be affected.

Recreational use would increase during the operation of the EES, resulting in a slight increase in demand for water, wastewater service, and electricity. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Traffic. The EES would require a pipeline to be built under SR 111 and a parallel railroad. When this pipeline is constructed, it would cause temporary road closures and detours.

New vehicle trips would occur on SRs 78, 86, and 111 from construction material delivery trucks and workers commuting to the construction sites to build evaporation towers, install the pipeline and relocate the high-power lines and supporting towers.

Recreational use would increase during the operation of the EES, resulting in a slight increase in traffic on local roads. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Public Education. The small number of construction workers and their families that may move to the project area would not cause a significant increase in the number of school-age children. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Police Services. Police services in the project area would be provided by the Imperial County Sheriff's Department. Basic security measures, such as installing fencing and lighting, locking equipment, and providing security patrols should minimize any attractive nuisance at the construction site. No significant impacts on police services are anticipated. Recreational use would increase during the operation of the EES, resulting in a slight increase in demand for police services. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Fire Services. Fire services in the project area would be provided by the Imperial County Fire Department and Office of Emergency Services. Permanent structures related to the concentration ponds would be earthen and would not result in an increase in fire hazard. No significant impacts are anticipated. Recreational use would increase during the operation of the EES, resulting in a slight increase in demand for fire services. Any impacts resulting from major development related to increased

recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Effect of Alternative 2 with Reduced Inflow Conditions (1.06 maf/yr)

Reduction of inflows to 1.06 maf per year would result in the same impacts. Impacts to traffic could be greater. These impacts would be related to the construction of the north wetland habitat and the displacement dike. Material for the displacement dike would be carried on a dedicated haul road that extends south on the west side of SR 86. A traffic control system will facilitate trucks crossing the highway at a point approximately 45 kilometers from the borrow site near the southern boundary of the Sonny Bono National Wildlife Refuge. Since no additional dedicated hauling roads have been designated, fill material for the north wetland habitat may be carried on the existing highway system. The proposed water transfer program would transfer conserved water and would not reduce the amount of water available for water service in the project area. The increased demand for electricity due to pumping required for operation of the North Wetland Habitat is expected to have a minimal effect on electrical services.

Some workers and their families would move to the area for the 48-month construction period. This small, temporary increase in demand would not cause significant stress on local utilities or public services.

4.15.7 Alternative 3

Power lines would need to be relocated with this alternative. With mitigation, no significant impact is expected. No other significant impacts are anticipated with any other public service or utility. Impacts would be the same for current inflow and reduced inflow conditions.

Effect of Alternative 3 with Current Inflow Conditions

Water Service, Wastewater Service, Electrical Service, and Solid Waste Disposal Facilities. The construction- and operation-related impacts for the EES at the former test base would be similar to those described for EES at Bombay Beach and would not be significant. A power line traverses the site and would need to be relocated. With mitigation, no significant impact is anticipated.

Recreational use would increase during the operation of the EES, resulting in a slight increase in demand on utilities. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Traffic. As noted above, the impacts would be caused by trucks hauling construction materials and construction worker traffic. The impacts would be focused on SRs 86 and 78 because the location of the EES is on the former test base.

Recreational use would increase during the operation of the EES, resulting in a slight increase in traffic on local roads. Any impacts resulting from major development

related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Public Education, Police Services, and Fire Services. Impacts related to construction and operation of the EES at the former Salton Sea Test Base Facility would be the same as those discussed for the EES north of Bombay Beach. No significant impacts are anticipated.

Effect of Alternative 3 with Reduced Inflow Conditions (1.06 maf/yr)

The effects of Alternative 3 and reduced inflows would be the same as those discussed for Alternative 2 with reduced inflow conditions for all utilities and public services.

4.15.8 Alternative 4

Traffic delays related to truck traffic crossing SR 86 using a traffic control device would be significant. Power lines and towers would need to be relocated with this alternative. With mitigation, no significant impact is expected. No other significant impacts are anticipated with any other public service or utility. Impacts would be the same for current inflow and reduced inflow conditions.

Effect of Alternative 4 with Current Inflow Conditions

Water Service, Wastewater Service, Electrical Service, and Solid Waste Disposal Facilities. The combined construction-related impacts for the EES at the former test base and the concentration pond would result from the small construction-related energy requirement and minor number of workers that would temporarily relocate to the project area. None of these impacts would be significant. A power line that traverses the EES would need to be relocated. With mitigation, no significant impact is anticipated. Salts accumulated during the enhanced evaporation process would be disposed of on the site. Therefore, local landfills would not be affected.

Operation of the evaporation pond and the Pupfish Pond entails pumping water from the Salton Sea into the impoundments. The demand for electricity is expected to be minimal; however, these estimates will be refined in the final design phase.

Recreational use would increase during the operation of the EES, resulting in a slight increase in demand for water, wastewater service, and electricity. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Traffic. There would be impacts to SRs 78, 86, and 111 as construction workers commute from Brawley and other nearby communities to the construction sites. As part of the pond construction, borrow material would be hauled on a dedicated road that runs parallel and west of SR 86. The material would cross the highway at a traffic control system, which would disrupt traffic flow on SR 86 during the 48-month construction period. Because an average of 1,000 daily truck trips is estimated, this would cause significant delays on SR 86.

The EES would require a pipeline to be built under SR 111 and a parallel railroad. When this pipeline is constructed, it would cause temporary road closures and detours.

New vehicle trips would occur on SRs 78, 86, and 111 when workers commute to the construction sites to build evaporation towers, install the pipeline, and relocate the high-power lines and supporting towers.

Recreational use would increase during the operation of the EES, resulting in a slight increase in traffic on local roads. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Public Education. The small number of construction workers and their families that may move to the project area would not cause a significant increase in the number of school-age children. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Police Services. Police services in the project area would be provided by the Imperial County Sheriff's Department. Basic security measures, such as installing fencing and lighting, locking equipment, and providing security patrols should minimize any attractive nuisance at the construction site. No significant impacts on police services are anticipated. Recreational use would increase during the operation of the EES, resulting in a slight increase in demand for police services. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Fire Services. Fire services in the project area would be provided by the Imperial County Fire Department and Office of Emergency Services. Permanent structures related to the concentration ponds would be earthen and would not result in an increase in fire hazard. No significant impacts are anticipated. Recreational use would increase during the operation of the EES, resulting in a slight increase in demand for fire services. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Effect of Alternative 4 with Reduced Inflow Conditions (1.06 maf/yr)

Reduction of inflows to 1.06 maf per year would result in the same impacts. Impacts to traffic could be greater. These impacts would be related to the construction of the north wetland habitat and the displacement dike. Fill material for the north wetland habitat may be carried on the existing highway system. Material for the displacement dike would be carried on a dedicated haul road that extends south on the west side of SR 86. A traffic control system will facilitate trucks crossing the highway at a point approximately 45 kilometers from the borrow site near the southern boundary of the Sonny Bono National Wildlife Refuge. The proposed water transfer program would transfer conserved water and would not reduce the amount of water available for water

service in the project area. The increased demand for electricity due to the pumping requirements of the North Wetland Habitat is expected to have a minimal effect on electrical services.

Some workers and their families would move to the area for the 48-month construction period. This small, temporary increase in demand would not cause significant stress on local utilities or public services.

4.15.9 Alternative 5

Traffic delays related to truck traffic crossing SR 86 using a traffic control device would be significant. No other significant impacts are anticipated to any other public service or utility. Impacts would be the same for current inflow and reduced inflow conditions.

Effect of Alternative 5 with Current Inflow Conditions

Water Service, Wastewater Service, Electrical Service, and Solid Waste Disposal Facilities. The combined construction-related impacts for the EES in the concentration pond would result from the small construction-related energy requirement and minor number of workers that would temporarily relocate to the project area. None of these impacts would be significant. Salts accumulated during the enhanced evaporation process would be disposed of on the site. Therefore, local landfills would not be affected. The increased demand for electricity due to pumping requirements for the North Wetland Habitat is expected to have a minimal effect on electrical services.

Recreational use would increase during the operation of the EES, resulting in a slight increase in demand for water, wastewater service, and electricity. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Traffic. There would be impacts to SRs 78, 86, and 111 as construction workers commute from Brawley and other nearby communities to the construction sites. As part of the pond construction, borrow material would be hauled on a dedicated road that runs parallel and west of SR 86. The material would cross the highway at a traffic control system, which would disrupt traffic flow on SR 86 during the 48-month construction period. Because an average of 1,000 daily truck trips is estimated, this would cause significant delays on SR 86.

New vehicle trips would occur on SRs 78, 86, and 111 when workers commute to the construction sites to build evaporation towers, install the pipeline, and relocate the high-power lines and supporting towers.

Recreational use would increase during the operation of the EES, resulting in a slight increase in traffic on local roads. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Public Education. The small number of construction workers and their families that may move to the project area would not cause a significant increase in the number of school-age children. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Police Services. Police services in the project area would be provided by the Imperial County Sheriff's Department. Basic security measures, such as installing fencing and lighting, locking equipment, and providing security patrols should minimize any attractive nuisance at the construction site. No significant impacts on police services are anticipated. Recreational use would increase during the operation of the EES, resulting in a slight increase in demand for police services. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Fire Services. Fire services in the project area would be provided by the Imperial County Fire Department and Office of Emergency Services. Permanent structures related to the concentration ponds would be earthen and would not result in an increase in fire hazard. No significant impacts are anticipated. Recreational use would increase during the operation of the EES, resulting in a slight increase in demand for fire services. Any impacts resulting from major development related to increased recreational opportunities at the Salton Sea (e.g., hotels and residential subdivisions) would be analyzed in a separate environmental document.

Effect of Alternative 5 with Reduced Inflow Conditions (1.06 maf/yr)

Reduction of inflows to 1.06 maf per year would result in the same impacts. Impacts to traffic could be greater. These impacts would be related to the construction of the displacement dike. Material for the displacement dike would be carried on a dedicated haul road, which extends south on the west side of SR 86. A traffic control system will facilitate trucks crossing the highway at a point approximately 45 kilometers from the borrow site near the southern boundary of the Sonny Bono National Wildlife Refuge. This would disrupt traffic flow on SR 86 during the 48-month construction period. The proposed water transfer program would transfer conserved water and would not reduce the amount of water available for water service in the project area.

Some workers and their families would move to the area for the 48-month construction period. This small, temporary increase in demand would not cause significant stress on local utilities or public services.

4.15.10 Cumulative Effects

Cumulative effects of regional projects and the Salton Sea restoration are not expected to be significant. The largest water demands would be short-term, during the construction period and should not be affected by the California 4.4 Plan. The IID water transfer program and canal lining projects would transfer conserved water only. Beneficial impacts would occur with the construction of the Mesquite Regional Landfill

and Heber Wastewater Treatment System, which would expand the capacity of solid waste and wastewater systems in the region.

4.15.11 Mitigation Measures

Electrical utilities that must be removed for project components would be replaced in kind. Replacement facilities would be constructed on relocated sites in advance of the planned demolition of existing facilities in a manner where the down time of relocated facilities is kept to a minimum.

The work shifts for construction workers will be scheduled so that commuting times do not coincide with regular work time schedules for other daily commuters.

Trucks hauling construction materials to the concentration ponds would be scheduled outside rush hours to minimize the effects of the traffic control system on SR 86. Trucks hauling construction materials to other sites and precipitated salts to landfills also will be scheduled outside the rush hours to avoid local commuter traffic.

4.15.12 Potentially Significant Unavoidable Impacts

The only potentially significant unavoidable impact anticipated for any alternative is related to traffic impacts during the construction of the concentration ponds. A traffic control system to stop vehicles on the SR 86 would cause significant delays, the severity of which would depend on the timing of the deliveries.

No potentially significant unavoidable impacts are anticipated for any other public service or utility for any alternative.