CHAPTER 3
PROJECT DESCRIPTION

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CHAPTER 3
PROJECT DESCRIPTION

3.1 INTRODUCTION

This chapter describes the objectives and alternatives of the East Highline Reservoir and Intake Channel Project and provides a detailed description of project characteristics as required by CEQA. This chapter also describes the discretionary actions required for the Proposed Project. Considering the Proposed Project is located partially under federal jurisdiction, the Proposed Project alternatives were developed in accordance with both NEPA and CEQA requirements for analysis of a reasonable range of alternatives (see Section 3.4, Alternatives). IID is acting as the state lead agency under CEQA, and Reclamation is the federal lead agency under NEPA. The lead agencies have directed and supervised the preparation of this Draft EIR, and the Environmental Assessment (EA) (Appendix A of this Draft EIR), and have independently evaluated its information and findings. Although IID is the agency preparing the environmental documentation and is responsible for construction, operation, and maintenance of the Proposed Action, Reclamation is considered the lead agency under NEPA because Reclamation is the federal agency with the authority to make permitting and project approvals.

This Draft EIR assesses the Proposed Project and alternatives to the Proposed Project as described below:

- No Project Alternative
- Reduced Size Reservoir Alternative
- Alternative Intake Route Alternative

The Proposed Project is discussed in detail in Section 3.2, Project Purpose and Objectives. The alternatives are discussed in Section 3.3, Proposed Project. Chapter 7, Alternatives, includes a discussion of the methodology used to screen alternatives and the rationale used to reject alternatives from further consideration and to identify the alternatives to be assessed in the EIR.

3.2 PROJECT PURPOSE AND OBJECTIVES

The underlying purpose for the Proposed Project is to facilitate in achieving state and regional water management and conservation goals. With these goals in mind, IID intends to augment current levels of operational flexibility while creating an additional tool to assist meeting main-system and on-farm conservation program goals. The Project is also consistent with the State of California's water conservation objectives established under Executive Order B-37-16 to use water more wisely, eliminate water waste, strengthen local drought resilience and improve agricultural water use efficiency. and The Proposed Project will assist the region in achieving the following objectives listed in the 2012 Imperial Integrated Regional Water Management Plan (IRWMP): (1) meet 100% of future

water demands without adverse impact to existing users that are not mitigated; (2) implement projects or programs that will provide a firm, verifiable, and sustainable supply of 50 to 100 thousand acre-feet per year for municipal, commercial, or industrial demands by 2025; and, (3) ensure equitable and appropriate cost sharing among water users who would receive benefits from any proposed water management project (Imperial Water Forum 2012). The Imperial IRWMP is part of the California Department of Water Resource's Integrated Regional Water Management Program, which was created to identify and implement water management solutions on a regional scale that increase regional self-reliance, reduce conflict, and manage water to concurrently achieve social, environmental, and economic objectives.

IID also has in place a comprehensive 2016 Water Conservation Plan, updated every five years, and actively implements Water Conservation Programs. Reservoirs are situated throughout IID's water distribution system as part of the ongoing Water Conservation Program. IID currently uses 11 independent regulating reservoirs to level out the variability in water supply and demand. The supply of water must be ordered from Parker Dam one week in advance; the quantity is based on the estimated demand. Actual demand is affected by weather conditions. In addition, three lateral interceptor systems are in place, with several more planned. These systems capture lateral operational discharge for reuse within the irrigation system. Each of the three lateral interceptor systems discharges to one of the 11 reservoirs. The captured discharge is used for water regulation, flexibility and delivery purposes. Like the regulating reservoirs, lateral interceptor systems conserve water and provide improved service to farmers. The Proposed Project would maximize operational flexibility and augment this existing system for a highly efficient water delivery system, while assisting the region and state in reaching the respectively adopted water conservation goals. In addition, the Proposed Project provides public benefit because it allows for improved management of Colorado River water within IID's distribution system to maximize water conservation and on-farm efficiency.

This section presents the objectives of the Proposed Project, in accordance with CEQA. Under CEQA, an EIR must include a "statement of objectives sought by the Proposed Project" (14 CCR 15124(b)). These objectives are used to establish the range of alternatives to be considered in the Draft EIR for the purposes of CEQA (14 CCR 15126(d)). For IID, the underlying objective of the Proposed Project is to augment current levels of operational flexibility while creating an additional tool to assist meeting main-system and on-farm conservation program goals. The specific objectives for IID are further described below:

- The Project will increase delivery flexibility and provide conservation opportunities within the district to accommodate in-valley water demand. These efforts are consistent with the objectives set forth in IID's 2016 Water Conservation Plan. Mid lateral and off line reservoirs are an integral part of the IID System Conservation Program.

- The Project will help support IID's 12-Hour Delivery Program via maximized operational storage capacity and flexibility, enabling farmers to match crop water requirements and conserve water. The reservoir will help balance supply-demand mismatches due in part to conveyance travel time, peak demands, unavailable storage, and rain events.

- The Project will provide consistency with the 2018 California Water Plan goals: Goal 2-Strengthen Resiliency and Operational Flexibility of Existing and Future Infrastructure; Goal 4-Empower California's Under-Represented and Vulnerable Communities; and, Goal 6-Support Real-time Decision-making, Adaptive Management, and Long-term Planning.

- The Project will be in support of the Reclamation Reform Act of 1982 to " . . . encourage . . . consideration and incorporation of prudent and responsible water conservation measures . . .by . . . recipients of irrigation, municipal and industrial water . . ."

The specific project design objectives are described below.

- Optimal reservoir placement that will benefit the greatest number of downstream IID water users and on-farm water conservation efforts.
- Utilize a route with the most beneficial hydrologic conditions to accommodate gravity flow (i.e., avoiding/minimizing pumping).
- Minimize the length of the intake channel from AAC and the outflow channel to EHL Canal.
- Minimize displacement of existing IID and farming infrastructure.

3.3 PROPOSED PROJECT

3.3.1 Location

The Proposed Project is located in the southern region of Imperial County, east of Calexico and southeast of Holtville (Figure 1-1, Project Location). The Proposed Project is located on five parcels (Assessor's Parcel Numbers 055-250-020, 059-310-005, 055-310-007, 055-310-006, 059-310-006), cumulatively totaling approximately 573 acres (Figure 1-2, Vicinity Map). The Proposed Project is within the Bonds Corner Geological Survey 7.5-minute quadrangles, with latitude and longitude coordinates of 32°43′35″N and 115°16′52″W. The Proposed Project is located directly east of the EHL Canal and directly west of BLM land. The proposed reservoir site is located approximately 1.3 miles north of the AAC, approximately 1.1 miles north of SR-98, and approximately 2 miles south of Interstate 8. To the east of the Proposed Project site is open and vacant desert land with desert shrubbery and patches of groundcover owned by BLM. Agricultural fields are to the northwest, west, and south of the Proposed Project site, with the EHL Canal directly adjacent to the west of the Proposed Project site.

Land Use and Zoning

According to the Imperial County General Plan Land Use Element, the land use designations of the Proposed Project is Agriculture and Recreation/Open Space (County of Imperial 2015). Under the County of Imperial Land Use Ordinance, the Proposed Project site is primarily flat land zoned as A-2 (General Agriculture) and A-3 (Heavy Agriculture), with a small portion that crosses a parcel of federal lands withdrawn to Reclamation. The current land use is agricultural. The Proposed Project would be consistent with agricultural land uses. The A-2 zone permitted uses include agricultural accessory structure(s), buildings, and uses. The A-3 zone permitted uses include agricultural accessory structures, miscellaneous uses including water storage or groundwater recharge facilities, and water systems (County of Imperial 1998). The proposed reservoir would be an agricultural accessory structure to IID's current irrigation and distribution system which spans over 1,667 miles of canals, contains similar accessory reservoir structures throughout which are designed to enable increased operational flexibility. IID delivers 97 percent of its water to agricultural operations.

3.3.2 Project Summary

The Proposed Project consists of an agricultural single cell water reservoir (with a split cell design option), covering approximately 370 acres, within a 417-acre footprint, for the operational management of up to approximately 3,400 acre-feet of water. The reservoir would have concrete-lined inside embankments and a geo-membrane liner on the base floor and extending up under the embankment concrete. The maximum water depth of the reservoir would be approximately 11 feet and a maximum below grade depth of 5 feet. Water temporarily stored in the proposed reservoir would be delivered to serve downstream agricultural demands through an automated gate outlet with a maximum gravity flow capacity of approximately 1,500 cfs for delivery into the EHL Canal. Water managed by the proposed reservoir would be delivered to agricultural water users. IID does not provide treated water service.

Water would be gravitationally conveyed from the AAC to the proposed reservoir via an open intake channel within a new proposed right-of-way (approximately 1.3 miles in length) for the temporary storage of water. Water from the reservoir would be ultimately delivered through an automated gate outlet and structure into the EHL Canal which serves the eastern Imperial Valley. Approximately 36 acres of the proposed intake channel would be constructed on agricultural land and approximately 11 acres of the proposed channel would cross Reclamation federally managed lands, at the southern end of the proposed intake channel route off the AAC.

The proposed intake channel will run from the north side of the AAC within the proposed 300-foot width of new ROW. The right-of-way would include the channel, embankments on either side, 24-foot-wide operation and maintenance roads on either side (top of embankment), and respective setbacks on either side (70-foot setback on the east side and 30-foot setback on the west

side). The actual channel would have a bottom of approximately 20 feet with a total open channel width of approximately 70 feet (concrete edge to concrete edge) and a depth of 10 to 15 feet from the top of the embankments. The intake channel would convey water flows at a flow rate of up to 1,500 cubic feet per second (cfs). Impacts to the AAC include the cutting of the AAC bank to allow a direct connection to the open intake channel. The intake structure would alter approximately 150 feet of the AAC bank with a maximum AAC disturbance area width of 250 feet. The embankments of the proposed intake channel embankment would have a height of approximately 10 feet above existing grade.

If the split cell design option is selected, the design would require a dividing embankment that would split the single cell reservoir diagonally from the southeast corner to the northwest corner of the reservoir (within the same Project footprint) the addition of a separate fore- and after-bay, would also be required within each cell. There would be two additional sets of automated gates needed in the fore-bay which would be situated in the north and west embankments that would deliver water to each cell. The after-bay would be located in the northwest corner of the reservoir where discharge into the EHL Canal is proposed. The after-bay would allow either cell to discharge into the EHL Canal through it. Additional automated gates would be installed in the fore-bay and after-bay. The split cell design option would facilitate long-term operation and maintenance.

Two potential staging areas are anticipated in the northwest and northeast portions of the Proposed Project site, as indicated on Figure 3-1, Project Description within an estimated 35 acres owned by IID. The construction and use of the Proposed Project is primarily for agricultural purposes to have a large operational reservoir that will allow for the management of fluctuating downstream agricultural demands due to increases in requests for shorter 12-hour water deliveries or any reductions from the normal 24-hour water delivery period. The Proposed Project would also allow for water conservation by creating a more efficient canal system with this additional water management facility upstream of most of IID's water service area. The Proposed Project will be beneficial to the public as it allows for the improved management of Colorado River water deliveries to agricultural users within IID's distribution system to maximize water conservation opportunities, efforts which are consistent with the Reclamation Reform Act of 1982, California's 2018 California Water Plan Goals and IID's 2016 Water Conservation Plan.

Required Permits and/or Approval

Implementation of the Proposed Project would require discretionary approvals by state and local agencies, as shown in Table 3-1, Project Approvals. Discretionary approvals would include certification of the Final EIR under CEQA, and approval and adoption of the Proposed Project by the County.

Table 3-1
Project Approvals

Authorizing Jurisdiction or Agency	Action
Bureau of Reclamation	Issuance of an Implementation Agreement
State Water Resources Control Board	Approval of NPDES Construction General Permit
California Department of Transportation	Approval of Encroachment Permit/Temporary Detour of SR-86
California Department of Fish and Wildlife	Approval of Section 1602 Streambed Alteration Agreement
California Regional Water Quality Control Board	Clean Water Act Section 402 Permit NPDES Certification
County of Imperial Public Works Department	Road Abandonment of Holdridge Road Holdridge Road Realignment Design Approval
Imperial County Air Pollution Control District	Approval of Authority to construct and/or permits to operate; Approval of Dust Control Plan

Note: SWPPP = Storm Water Pollution Prevention Plan; NPDES = National Pollutant Discharge Elimination System.

3.3.3 Project Components

The Proposed Project would involve two principal components 1) intake structure and conveyance channel, and 2) reservoir and outlet gate:

Intake Structure and Conveyance Channel: The proposed intake channel would be located along agricultural land, south of the proposed reservoir site, with the exception of approximately 11 acres that would cross federally owned lands, withdrawn to Reclamation, at the southern end of the proposed intake channel route off of the AAC. The proposed intake channel would consist of an open channel approximately 75 feet wide and 10 to 15 feet deep from the top of the embankments. The embankments of both the proposed reservoir and the proposed intake channel would have a height of approximately 10 feet above finish grade. The intake channel would be concrete lined for reinforcement. Impacts to the AAC include the cutting of the AAC bank to allow a direct connection to the open intake channel. The cut bank would alter approximately 250 feet of the AAC bank.

Regarding construction, temporary impacts may occur within a 300-foot buffer from the length of intake channel to allow for activities like vehicles passing, laydown, and staging. As such, the total area for construction disturbance for the intake canal would be 47 acres, with approximately 36 of these acres occurring on disturbed farmland. The intake structure and canal would entail excavating and concrete lining the intake canal following the alignment shown in Figure 3-1, Project Description. This would include going under SR-98 and under the AAC Drain 2A. Going under SR-98 and the AAC 2A would be achieved with a row of box culverts across the entire width of the intake channel that would be constructed via open cut, cast in place. An Encroachment Permit will be secured through the California Department of Transportation (Caltrans) as well as approval of temporary detour plans to accommodate construction of the conveyance channel across SR-98.

The proposed reservoir would have a flat floor, gradually sloped, to allow for gravity flow into the EHL Canal and utilize the natural terrain to promote a balanced and efficient use of on-site native materials. The proposed reservoir and proposed intake channel would be excavated to approximately 5 feet below grade.

Reservoir and Outlet Gate: The Proposed Project includes a single cell reservoir facility, covering approximately 370 acres, which would manage up to 3,400 acre-feet of water. The reservoir would have concrete lined inside embankments and a geo-membrane liner on the base floor. The maximum water depth of the reservoir would be approximately 11 feet and have a maximum below grade depth of 5 feet. The water managed in the proposed reservoir would then gravity flow into the EHL Canal, one of the three main canals that are owned and operated by IID and that branch off of the AAC. The AAC facility is owned by the U.S. Department of the Interior through Reclamation, and is operated by IID under contract with Reclamation. The AAC is the primary source of water for the Imperial Valley, IID's water service area.

Temporarily stored water would be delivered through automated outlet gates and structure upon downstream demand. The outlet gate and structure would have a gravity flow capacity of approximately 1,500 cfs for delivery into the EHL Canal. The automated outlet gate would use electricity via connection to existing electrical lines servicing the project site. See Table 3-2 for the list of equipment that would be used during construction of the reservoir. In addition, a driveway with controlled access and perimeter roadway around the reservoir would be constructed to allow for inspections and maintenance. Approximately 28,700 cubic yards of concrete would be used for construction of the reservoir, outlet and associated supports. Approximately 100 workers in total would be anticipated to undertake the described construction activities for the reservoir and outlet gate phase, which would be drawn from the local labor force.

Split Cell Design Option: The split cell design option includes the splitting the single cell reservoir by a separating embankment. If the split cell design option is selected, the design would require the addition of a separate fore- and after-bay, as well as the dividing embankment that would split the reservoir diagonally from the southeast corner to the northwest corner of the reservoir (within the same Project footprint, just slightly higher embankments). The fore-bay would be constructed just after the intake gates at the southeast corner of the reservoir and would be approximately 400' x 400' (3.7 acres in size). There would be two additional sets of automated gates needed in the fore-bay which would be situated in the north and west embankments that would deliver water to each cell with the same capacity of the intake channel of 1500 cfs. The after-bay would be located in the northwest corner of the reservoir where discharge into the EHL Canal is proposed. The after-bay would allow either cell to discharge into the EHL Canal through it. Additional automated gates would be installed in the fore-bay and after-bay.

Construction activities would take place over a series of phases that may overlap or run concurrently as noted in Table 3-2.

Table 3-2
Phasing and Equipment

Phase Number	Phase Name	Months of Construction	List of Equipment*
Phase 1	Reservoir	15	Pickups, Dozer, Large Excavator Backhoe, Dump Truck (40 ton wagons), Flat Bed Truck, Vibratory Compactor, Ready-mix Concrete Trucks, Shotcrete Pump, Concrete Curing Applicator, Water Truck, Caterpillar motor grader, Small Crane or Large Boom Truck, 25 kVA Portable Generator, Dewatering Pump System
Phase 2	SR-98 Detour	1	Pickups, Caterpillar 633 Self-loading scraper, Dump Truck, Vibratory Compactor, Asphalt/Road Base Trucks, Asphalt Pavers, Smooth Drum Roller Compactor, Water Truck, Caterpillar motor grader
Phase 3	Sedimentation Basin	3	Pickups, Dozer, Large Excavator Backhoe, Dump Truck (40 cy wagons), Gradall (Trimming), Ready-mix Concrete Trucks, Shotcrete Pump, Concrete Curing Applicator, Flat Bed Truck, Vibratory Compactor, Water Truck, Caterpillar motor grader, 25 kVA Portable Generator, Dewatering Pump System
Phase 4	Canal and Measurement Flume	3	Pickups, Gradall (Trimming), Ready-mix Concrete Trucks, Shotcrete Pump, Concrete Curing Applicator, Flat Bed Truck, Vibratory Compactor, Caterpillar 633 Self-loading scraper, Small Boom Truck, Water Truck, Caterpillar motor grader, 25 kVA Portable Generator, Dewatering Pump System
Phase 5	Canal Tie-Ins	3	Pickups, Large Excavator Backhoe, Dump Truck, Pile Driving, Vibratory Compactor, Gradall (Trimming), Ready-mix Concrete Trucks, Shotcrete Pump, Concrete Curing Applicator, Small Crane or Large Boom Truck, Water Truck, 15 kVA Portable Generator, Dewatering Pump System
Phase 6	Structures	3	Pickups, Dozer, Large Excavator Backhoe, Dump Truck (40 cy wagons), Gradall (Trimming), Ready-mix Concrete Trucks, Shotcrete Pump, Concrete Curing Applicator, Flat Bed Truck, Vibratory Compactor, Water Truck, Caterpillar motor grader, 25 kVA Portable Generator, Dewatering Pump System

*Not all equipment listed is used in all months of the identified construction phase.

The split cell option design would be constructed with the same type of materials, in the same manner as the single cell design described above. The split cell design option would require approximately 255,000 additional cubic yards of material to be handled and all of it would be generated from the Project site; no imported dirt would be required. An additional 7,500 linear feet of concrete lined embankment would be required for this option (up to an additional 12,700 CY of concrete).The size of the embankments would be the same as the Proposed Project at 10 feet above existing grade and have an outer slope extending approximately 40 feet in width on both sides.

The split cell design option design would facilitate long-term operation and maintenance. Sediment clean out would be able to occur in one cell while the other cell continues to operate and manage water deliveries, and vice versa. The split cell design option is not a preferred design

option as it would result in a substantial increase of construction costs. The split cell design option would be implemented to facilitate long-term maintenance of the facility or to comply with any permitting requirements.

3.3.4 Construction

Construction of the reservoir would take a total of approximately 15 months and would involve six principal phases, as previously introduced and described in more detail in the following paragraphs. Phase activities may overlap or run concurrently.

Reservoir (Phase 1): The construction of the reservoir is anticipated to occur over about a 15-month construction period. Construction of the reservoir will require a crew consisting of a maximum of 100 construction workers on site for any one day, over the duration of the construction period. The total area that will be excavated and graded is approximately 525 acres. The total volume of excavation is estimated to be about 2.4 million cubic yards. The temporary disposal/storage facility is north of and adjacent to the proposed reservoir. However, a material balance is expected at project end. The quantity of concrete lining for the reservoir would be approximately 11,500 cubic yards. A geo-membrane liner would be installed at the base of the reservoir and extend up under the concrete lining in the embankment. Table 3-2 presents the construction equipment that will likely be required at various times during the construction of the reservoir. Holdridge Road realignment would take place during this phase.

State Route 98 Detour Roadway (Phase 2): The SR-98 Detour Roadway would occur during the first month of construction. The detour plans would be coordinated through, and approved by, Caltrans as well as Reclamation for the small portion affecting federal withdrawn lands. The detour would be a temporary, while construction of the intake route intersects with SR-98. Table 3-2 presents the construction equipment that would likely be required at various times during the construction of the detour roadway.

Intake Channel and Sedimentation Basin (Phase 3): The construction of the sedimentation basin would be anticipated to occur over about a 3-month construction period. Construction of the sedimentation basin would require a crew consisting of a peak of 40 workers at one time over the duration of the construction period but average 15 workers. The total area that will be graded is approximately 10 acres. The total volume of excavation is estimated to be about 120,000 cubic yards. The temporary disposal/storage facility is proposed to be located north and adjacent to the reservoir. The quantity of concrete lining for the sedimentation basin would be approximately 3,000 cubic yards. Table 3-2 presents the construction equipment that would likely be required during the construction of the sedimentation basin. This phase would overlap with phase 4, Canal and Measurement Flume.

Intake Channel and Measurement Flume (Phase 4): The construction of the canal and measurement flume would be anticipated to occur over about a 3-month construction period. Construction of the canal and measurement flume would require a crew consisting of a peak of 20 workers at one time, over the duration of the 3-month construction period. The total area that will be graded is approximately 42 acres. The total volume of canal embankment is estimated to be about 225,000 cubic yards. The material will be hauled primary from the reservoir excavation for the construction of the canal embankment. The quantity of concrete lining would be approximately 4,000 cubic yards. Table 3-2 presents the construction equipment that would likely be required during the construction of the canal and measurement flume.

Canal Tie-Ins (Phase 5): The construction of the AAC Tie-In and EHL Canal Tie-In would occur over an approximately three-month period and would require a crew consisting of a maximum of 10 workers over the duration of the construction period, after the SR-98 Detour Roadway, and would overlap partially with the sedimentation basin (Phase 3) and the canal and measurement flume (Phase 4). Table 3-2 presents the construction equipment that would likely be required at various times during the construction of the tie-ins.

Structures (Phase 6): The construction of the SR-98 crossing, canal inlet structure, reservoir outlet structure, meter vault, and EHL Canal outfall structure would occur over an approximately 6-month period and would require a crew consisting of a maximum of 12 workers over the duration of the construction period. Table 3-2 presents the construction equipment that would likely during the construction of the structures.

3.3.5 Operation

The Project is not a manned facility. The Proposed Project would be accessible for ongoing maintenance from existing County dirt roads, Verde School Road, and Holdridge Road (existing and proposed realigned segment). These County roads are accessible via Bonds Corner Road and SR-98. Maintenance would be undertaken by IID in accordance with existing practices for inspections and repair. No on-site operations and maintenance facilities would be provided. Inspections would be made via crew trucks and using the existing roads infrastructure and the constructed access and maintenance roads for the intake channel and reservoir. The facilities are gravity flow and the outlet gate would be controlled by a remote operated automated mechanism. Should the split cell design option be implemented, the two additional sets of gates needed in the fore-bay would also be automated as would the gates needed in the after-bay.

3.4 ALTERNATIVES

3.4.1 Selection of Project Alternatives

Project alternatives were selected in accordance with both the CEQA Guidelines and NEPA requirements. A reasonable range of alternatives have been identified. The following provides a summary of the alternatives considered but rejected based on screening criteria used to evaluate alternatives and rationale for excluding those alternatives not taken forward for further study in this EIR.

Alternatives Considered But Rejected

Multiple Smaller Reservoirs

The Multiple Smaller Reservoirs Alternative would construct seven reservoirs on privately owned agricultural parcels. These reservoirs would be smaller in size, and each would be operated by the landowner of the land on which the reservoir is located. The Multiple Smaller Reservoirs Alternative was developed to provide an alternative to the Proposed Project that would benefit the local farmers and provide nearby farms with a plentiful, independent water supply. This alternative would not accomplish all the Project objectives and only provide a few local land owners with increased water delivery flexibility, thus leaving the remaining downstream water users with no additional benefit from an improved system efficiency. Overall, this alternative would not avoid any significant environmental effects, or accomplish the Proposed Project objectives and was eliminated from further consideration.

Single Reservoir Alternative Site Locations

IID considered 11 sites prior to determining the most appropriate site for the Proposed Project. However, 10 of these sites were eliminated as prospective sites due to one or more of the following reasons: the hydraulic conditions of the site are not adequate to be redeveloped as a reservoir and supporting infrastructure, the site is located on BLM Areas of Critical Environmental Concern (ACEC) land, or the site was considered financially infeasible. The 10 eliminated alternative site locations are listed below.

1. North of Anza Road, east of Bowker Road, and southwest of the AAC
2. North of the AAC, east of Claverie Road, south of Carr Road, and west of SR-7
3. North of the AAC, east of Hawk Road and south of SR-98
4. North of the Mexico Border, south of the AAC, approximately 1 mile southeast of Bonesteele Road
5. Southeast of Holdridge Road, approximately 0.25 miles north of SR-98

6. Northwest of Holdridge Road, approximately 0.15 miles southeast of the EHL Canal
7. Southwest of Holdridge Road, approximately 0.7 miles southeast of the EHL Canal
8. South of Desert Road, approximately 0.7 miles northeast of Verde School Road
9. North of SR-98, approximately 1.15 east of Holdridge Road
10. South of SR-98, approximately 4 miles northwest of the SR-98 and I-8 intersection

Alternatives Considered for Evaluation

The following are three alternatives to the Proposed Project that were considered and have been taken forward for evaluation under this EIR:

- No Project Alternative
- Reduced Size Reservoir Alternative
- Alternative Intake Route Alternative

Chapter 7 of this EIR compares each of the project alternatives, including the No Project Alternative, against the Proposed Project, and identifies the environmentally superior alternative.

3.4.2 Description of Alternatives

The following describes the alternatives to the Proposed Project that have been taken forward for evaluation in this EIR.

No Project Alternative

The No Project Alternative is the scenario under which the Proposed Project is not permitted, constructed, or implemented. The No Action Alternative provides a basis for comparison of the environmental consequences of the proposed action. It is defined as "existing environmental conditions" as well as what would reasonably be expected to occur in the foreseeable future if the Proposed Project were not approved, based on current plans and consistent with available infrastructure (14 CCR 15126.6(e)(2)).

Reduced Size Reservoir Alternative

The Reduced Size Reservoir Alternative would manage up to approximately 2,700 acre-feet of water, over approximately 290 acres of agricultural land. Compared to the proposed 370-acre reservoir, the Reduced Size Reservoir would be approximately 80 acres smaller, with 700 acre-feet less water capacity (Figure 3-2, Reduced Size Reservoir Alternative). The Reduced Size Reservoir would lessen the acreage of agricultural land affected and lessen the potential for cultural, paleontological, biological, and tribal resources to be encountered.

Alternative Intake Route Alternative

This alternative would entail the proposed reservoir in the same placement; however, the intake route to the AAC would be located further east of where the proposed intake route is, through BLM land as shown on Figure 3-3, Alternative Intake Route Alternative. This alternative would extend directly north from the AAC and roughly parallel the western boundary of the BLM lands, staying on the farmland, to the EHL Reservoir site at approximately the same connection location (Figure 3-3).

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SOURCE: IID 2016

DUDEK 0 1,000 2,000 Feet

FIGURE 3-1

Project Description

East Highline Reservoir and Intake Channel Project

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SOURCE: SOURCE: IID 2016

DUDEK 0 700 1,400 Feet

FIGURE 3-2

Reduced Size Reservoir Alternative

East Highline Reservoir and Intake Channel Project

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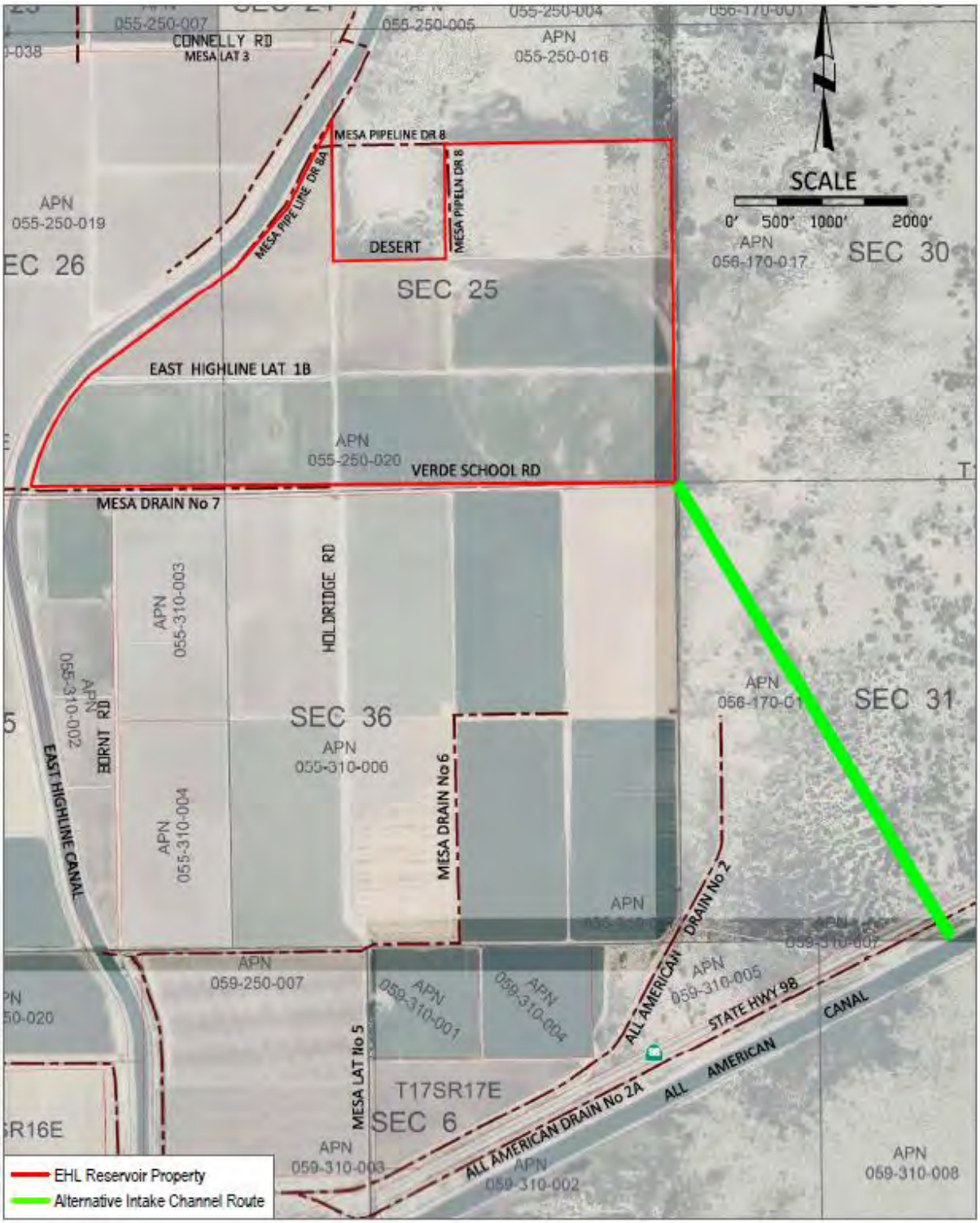

SOURCE: SOURCE: IID 2016

DUDEK

0 1,000 2,000 Feet

FIGURE 3-3

Alternative Intake Route Alternative

East Highline Reservoir and Intake Channel Project

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