2.0 Project Description

2.1 Background and Project Origin

The Town of Windsor has used recycled water to irrigate agricultural lands, recreational facilities, schools, and residential yards for over a decade. Each year, the Town treats approximately 650 million gallons (MG) of wastewater to recycled water standards and reuses approximately 350 MG. The remaining 300 MG is discharged to Mark West Creek, as allowed under the Town's National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit allows discharge to Mark West Creek from October 1 to May 14 at a rate of up to 1percent of the natural flow in the creek. Using recycled water for irrigation saves millions of gallons of fresh water each year and helps the Town comply with its discharge permit requirements.

The background of the Town's Water Reclamation Master Plan is described in the document *Town of Windsor Water Reclamation Master Plan for Treatment, Storage and Disposal* (referred to herein as the Master Plan) (Brelje & Race, 2001) and is summarized here. In 1996, the Town prepared a Draft Water Reclamation Master Plan to address development projected in the *Town of Windsor General Plan – 2015* (General Plan) (Ogden, 1996a). The Draft Water Reclamation Master Plan was first presented to the Town Council in October 1997. At that time, selection of a preferred alternative was deferred until other options, including participation in the Santa Rosa Geysers Recharge Project and/or joint use with the Airport treatment plant, could be investigated. An amended plan, including these options, was completed in January 1999. The Town Council then selected three alternatives for environmental review at an equal level of detail. An Environmental Impact Report (EIR) (ESA, 2000) was prepared to evaluate the environmental impacts of the three alternatives and the EIR was certified by the Town Council on February 7, 2001 (Master Plan EIR; ESA, 2001). The Town Council adopted Resolution No. 1006-01 approving the preferred water reclamation program alternative, known as Alternative 4X, as the Master Plan on March 8, 2001.

The Master Plan (Brelje & Race, 2001) describes the various projects and programs needed to meet the effective recycled water storage and discharge needs of the Town of Windsor at its buildout. The General Plan, adopted in 1996, sets forth land uses that would allow an increase in the permanent population from approximately 19,200 persons at the time of General Plan adoption to approximately 36,100 persons at buildout, projected to occur by the year 2015; the Final EIR for the General Plan revised the estimated population to 35,200 persons at buildout (ESA, 2000). With the later revision of the Sphere of Influence to be coterminous with the 1998 voter-approved Urban Growth Boundary, the Town's projected buildout population was reduced to 34,200 (ESA, 2000). The Town adopted a Growth Control Ordinance, which limits the number of new residential units that can be constructed per year. The limit is currently established at 150 units per year, below the annual growth rate of 2.85 percent assumed in the General Plan. The limit on new residential units is reviewed by the Town Council on an annual basis. If the Growth Control Ordinance

remains in effect, as is assumed for this Draft SEIR, buildout under the General Plan would be achieved in about 2042; without the ordinance, buildout would be achieved sooner. At buildout, average dry weather flow (ADWF) into the water reclamation plant is expected to be 3.0 million gallons per day (mgd) (Brelje & Race, 2001), which is beyond the capacity of the Town's existing water reclamation system.

The Eastside Road Storage Project (previously known as the Pond T project and referred to herein as the Project) was included in the Master Plan as a cornerstone of Alternative 4X. In accordance with the Town Council's direction, other program elements were pursued first in order to defer significant and unavoidable impacts associated with construction of a storage pond and to reflect other Town priorities for the recycled water system. Because of problems and delays in implementing some of the other recycled water system program elements, including but not limited to uncertainty over implementation of the Geysers Recharge project, the Town now needs to move ahead with the Project.

2.2 Project Objectives

The Town adopted the Master Plan to meet wastewater treatment, storage and reclamation needs to serve the Town through projected build-out. The Master Plan includes the following components (Brelje & Race, 2001; ESA, 2001):

- An increase of treatment plant capacity to 3.0 mgd ADWF, with continued treatment to Title 22 disinfected tertiary reclaimed water standards
- Discharge of up to 0.75 mgd to Geysers Recharge
- Increase in effluent storage capacity to a total of 360 MG
- Approval of Pond S (125 MG), Pond T1 (249 MG), and/or Pond T2 (146 MG)
- Total irrigation area of 820 equivalent acres[1], with irrigation both within and outside Town limits
- Continued discharge to Mark West Creek at up to 1 percent of natural stream flow from October 1 through May 14
- Constructed wetlands
- Pilot silviculture project
- Water conservation program

The Town certified the Master Plan EIR with the following specific objectives for the Master Plan, as stated in the Master Plan Draft EIR (ESA, 2000):

- Continue to provide wastewater treatment, storage and disposal in an environmentally sound manner in compliance with all applicable federal, state and local regulations.

[1] An "equivalent acre" uses 30 inches (2.5 acre-feet) of irrigation water per growing season. The Town uses the term equivalent acre to assist in comparison of irrigation lands with varying water demand. Thirty inches per acre is typical for grass, fodder crops or turf. Vineyards typically use 5 inches (0.4 acre-feet per acre) of water per year. Approximately 6 acres of vineyard would therefore be equivalent to one equivalent acre.

- Develop adequate treatment, storage and disposal facilities to meet projected effluent generation associated with buildout under the adopted General Plan.
- Maximize the use of existing or available infrastructure to provide an economically efficient program for effluent treatment, storage, and disposal.

The Master Plan EIR states that the storage configuration between Pond S and Pond T (T1, T2) will be implemented in the most cost-effective manner (ESA, 2001). In adopting the Master Plan, the Windsor Town Council also directed that construction of either of Ponds S, T1 or T2 be postponed as long as possible in order to avoid extensive tree loss associated with construction of these ponds, and encouraged the use of alternative pond sites identified for the Master Plan (Brelje & Race, 2001).

As described above, problems and delays in implementing some of the other recycled water system program elements have occurred. Without the Project, the Town expects to encounter a recycled water storage and disposal capacity shortfall by 2012 (see Figure 2-1). The "Minimum Permit Compliance" line on Figure 2-1 shows the minimum storage capacity that will be needed assuming the maximum discharge to Mark West Creek (1 percent from October 1 to May 14).

The Project would be part of the existing recycled water program and serve as a storage pond. The pond would be filled during spring and fall when recycled water production cannot be discharged to Mark West Creek or used for irrigation; the pond would then be drawn down during the winter and summer when water can be discharged to Mark West Creek (winter) or used for irrigation (summer) when demand exceeds recycled water production (Figure 2-2).

As a key component of the Master Plan, the purpose of the Eastside Road Storage Project is to provide essential storage of recycled water in a reliable, feasible manner that encourages the best use of water resources and assures long-term recycled water supply. The Town wishes to manage recycled water in a manner that facilitates reuse opportunities. The Project would meet reuse and disposal permit requirements, as well as significantly contribute to the reduction of freshwater demand on the Russian River.

Specific objectives of the Project are as follows:

- Continue implementation of the Water Reclamation Master Plan to address the buildout ADWF of 3.0 mgd.
- Provide a minimum of 125 MG of additional recycled water storage capacity by water year 2012 (October 2011-September 2012).
- Provide the maximum pond storage capacity consistent with the Master Plan, in a cost-effective manner and in compliance with applicable regulations.

2.3 Project Location

The Project site is located within Town limits on a Town-owned 168-acre parcel near the intersection of Eastside Road and Trenton-Healdsburg Road (see Figure 2-3). The parcel is surrounded by County land and roadways, including Eastside Road to the west, Mark West

Station Road to the south, and agriculture and rural residential to the east and north. The Russian River is located approximately ½ mile to the west. The Sonoma County Water Agency's Ocean View Reservoir is just east of the parcel. The Windsor Water District acquired the parcel in 1991 for future use as a water reclamation storage pond site. The site was annexed into the Town limits in 2000 as a utility parcel. The property is situated near many of the Town's irrigation customers, the recycled water pipeline, and the Town's existing discharge facilities at Mark West Creek.

The Project parcel is located in the foothills that form the western rim of the Santa Rosa – Cotati Valley, which lies within the northern Coast Ranges of California. The terrain on the Project parcel is hilly, characterized by several east-west trending ridgelines with incised drainages between them. Hillside slopes are generally steep with some gentler slopes along the western edge of the site. The parcel is undeveloped; vegetation is primarily oak woodland, with areas of grassland and coastal scrub. The pond site (Pond T in the Master Plan) is located in a central intermittent drainage of the parcel between ridgelines of approximately 260 feet in elevation.

2.4 Project Description

The proposed Project consists of a storage pond with a capacity of approximately 215 MG of storage, an onsite pump station, and a pipeline to connect to the existing recycled water distribution system. These three components are described in more detail below.

2.4.1 Storage Pond

The storage pond would be established by constructing an earthen dam at the western end of the drainage, near Eastside Road, to maximize the amount of storage available (see Figure 2-4). The dam would be approximately 600 feet long at its top and approximately 115 feet high, with a top elevation of approximately 215 feet and slope faces of approximately 3 Horizontal to 1 Vertical (3H-1V) on the upstream slope of the dam and approximately 2.5H-to-1V on the downstream structural embankment slope (see Figure 2-5). The dam would be primarily constructed using onsite materials excavated from the footprint of the pond. Excess topsoil from pond construction would be placed in a berm to further flatten the downstream slope of the dam to approximately 3-H-to-1-V and to provide horizontal benches. Most of the removed topsoil would be reused onsite either in this berm or for reclamation of areas disturbed by construction, such as cut slopes above the pond perimeter access road. Imported materials would be used for drainage (filter sand and fine-grained drain gravel), access roads (gravel surfacing) and limited quantities of riprap.

Creation of the storage pond itself would entail approximately 590,000 cubic yards of excavation and fill (see Figure 2-5). Most of the storage capacity would be provided by the natural topography of the small valley behind the dam. In addition to providing soil for the dam, excavation within the pond area increases the pond storage capacity, reducing the height of the dam required. The pond area would be graded to a configuration that blends smoothly into the natural topography, is suitable for lining, and provides slopes that are stable and resistant to erosion. While pond grading would entail mostly excavation, some fill material would be needed to flatten the pond bottom and smooth the pond slopes for the

liner installation; to construct a small perimeter berm near the northeast corner of the pond; and to fill low areas outside the pond edge for proper drainage.

When the pond is full, the surface water elevation would be approximately 209 feet, leaving approximately six feet of freeboard to accommodate heavy rainfall events or waves as required by state dam safety regulations. When full, the pond surface would cover an area of approximately 18.1 acres.

The pond will be lined with a synthetic membrane liner to protect side slopes of the pond and restrict pond seepage. During final design, a liner cover may also be included if it is determined to provide long-term savings in operations and maintenance costs. The cover would consist of gravel, concrete, or plastic soil cement (a concrete-like material made from onsite soils mixed with cement) and would be confined in a thin layer by a system of geosynthetic grids.

To protect the pond liner from possible uplift when the pond is empty, protective underdrains would be installed where necessary. The underdrains would drain back to the pond through a one-way check valve or to a sump where the water could be pumped back to the pond.

A submerged inlet structure, typically a small box-like structure constructed of reinforced concrete, would be placed near the bottom of the pond at the upstream end of the inlet/outlet pipe for filling and emptying the pond. This structure would include a flow-control valve and trash rack as required by state dam safety regulations. Hydraulic or pneumatic tubes and a vent pipe would run up the dam slope to a buried vault on the dam crest that would house the gate actuator.

In compliance with California Department of Water Resources, Division of Safety of Dams (DSOD) requirements, the pond must have an emergency outlet that can drain water by gravity from the pond in the event of a dam safety emergency, and an emergency spillway to prevent dam overtopping in an extreme storm event. Both the emergency outlet and emergency spillway would release water to the downstream drainage ditch through an energy dissipater to minimize erosion. The emergency outlet and emergency spillway would be sized for a design capacity of approximately 24 and 30 cubic feet per second, respectively, as required by DSOD. No normal operational release or releases during storms up to the 100-year event would be done using the emergency outlet or emergency spillway. Operational freeboard is sized to prevent accidental discharge to the downstream drainage when the pond is full. Accidental discharge could occur either due to waves or uncontrolled pumped inflow (in the event that pumps should fail to shut off followed by failure of a second redundant automatic pump shutoff system).

An approximately 15-foot-wide gravel access road would be provided across the top of the dam and around the pond perimeter, at an elevation of approximately 215 feet (see Figure 2-5). A fence approximately eight feet high, such as chain-link or deer fence topped by barbed wire, would be placed outside this road to provide security. On the dam, the fence will be below the downstream edge of the crest. An approximately 15-foot-wide concrete ramp, with approximately ten percent grade, would be installed in the interior of the pond to allow access to the pond bottom.

Overall site access would be from the main access off Eastside Road (see Figure 2-4). This gravel road would be up to approximately 25 feet wide, with a grade less than seven percent, and would be secured with a locked gate.

2.4.2 Pump Station

A new pump station would be constructed onsite to pump stored water into the recycled water system. The new pump station would be located along Eastside Road just west of the storage pond dam (see Figure 2-4).

The pump station would consist of multiple pumps inside a covered pumphouse to provide a pumping rate up to 7,000 gallons per minute. The wet wells below the pumps would extend roughly 9 feet into the ground. The footprint of the pumphouse would be approximately 40 feet by 35 feet and the structure would be a single-story concrete masonry unit block building with a raised ridge metal roof. Approximately 15,000 square feet around the pumphouse would be disturbed in order to install a driveway approximately 100 feet wide at the entrance from Eastside Road, a culvert to maintain drainage along Eastside Road, and a small parking area. A fence approximately eight feet high, such as chain-link with privacy slots plus barbed wire, and a gate would be installed for security.

2.4.3 Pipelines

Approximately ½ mile of a new pipeline up to 24 inches in diameter would be constructed along Eastside Road and Trenton-Healdsburg Road to connect the storage pond to the existing recycled water system along Mark West Station Road (see Figure 2-4). This pipeline likely would be installed in the northbound lane of Eastside Road and the westbound lane or shoulder of Trenton-Healdsburg Road, at a depth of approximately five feet. If pipeline installation requires disturbance of the adjacent roadside drainages, the drainages would be recontoured and revegetated following construction.

An inlet/outlet pipeline, approximately 30 inches in diameter, would be installed from the inlet structure under the dam to the pump station. In addition to its normal operational use for filling and draining the pond from/to the recycled water system, it provides a path for emergency draining of the pond to the natural downstream drainage as required by state dam safety regulations. The inlet/outlet pipe would only discharge to the downstream drainage in a dam safety emergency. The 30-inch pipe diameter would allow access by people for future inspection and maintenance.

An overflow pipeline approximately 36 inches in diameter would be included north of the 30-inch pipeline (see Figure 2-5) to function as an emergency spillway as required by state dam safety regulations. As discussed previously, this pipeline would only be used in larger flood emergencies. When the overflow pipeline is in use, pond water would be discharged through an energy dissipater into the existing natural drainage near Eastside Road (see Figure 2-5).

2.4.4 Project Operations

Recycled water would be pumped through existing pipelines and the new mainline in Eastside Road into the pond through the inlet valve.

The pond would provide seasonal water storage. The pond would be filled during spring and fall when recycled water cannot be discharged to Mark West Creek or used for irrigation, then drawn down during the winter and summer when water can be discharged to Mark West Creek when flows are higher (winter) or used for irrigation (summer) when demand exceeds recycled water production (see Figure 2-2). Pond storage levels, filling rates, and draining rates over the course of the year would be managed by the Town's operations staff as part of the overall recycled water system. Variables affecting pond levels include variation in climate, flowrates in Mark West Creek, recycled water production, irrigation demand, and other system operational factors and constraints. With drawdown and filling cycles, the seasonally averaged pond size would be approximately 10.8 acres (when full or near full, the pond size would be greater, up to the maximum size of approximately 18.1 acres; when substantially drawn down, the pond size would be smaller).

Per the Town's NPDES permit, the discharge limit is set at 1 percent of the natural flow in Mark West Creek. Discharging is not allowed from May 15 through September 30 of each year in accordance with the permit requirements. Project operations would continue to comply with the NPDES permit.

The pond and pump station would not be staffed full-time. Operations and maintenance workers would make periodic visits to perform pump maintenance, check liner condition, monitor dam safety instrumentation, and perform general site maintenance work. If the pond liner is not covered, it is expected to require replacement approximately every 25 years. If the liner is covered, it is not expected to need replacement for approximately 50 years.

As part of the Project, the Town would install two up-gradient and three down-gradient monitoring wells or piezometers. Monitoring wells will help confirm the assessment of hydraulic gradient and flow direction. Monitoring wells would be monitored annually for chloride as a good tracer for monitoring leakage and flow direction away from the pond.

2.4.5 Project Construction

Initial construction activities would include mobilization for and completion of tree removal in the Project construction area. Grading of access roads would be completed as needed to reach trees. Tree removal over approximately 28 acres would take about two months and is tentatively scheduled to start in August 2010 to minimize impacts to nesting birds and roosting bats. Trees removed would be beneficially reused locally to the degree feasible; reuse opportunities include a wood cogeneration plant, construction of a shelter in Adobe State Park, use by local woodturners, and use for mulch. Following removal of the trees, appropriate erosion control measures would be installed to protect water quality during the winter.

Construction of the Project facilities would follow tree removal and would last approximately 24 months. Table 2-1 summarizes the estimated schedule of major project components.

TABLE 2-1
Project Construction Schedule

Activity	Month	Year
Final engineering design	January – August	2009
Construction begins	August	2010
Tree removal	August – October	2010
Pond excavation and dam construction	March – November	2011
Pipeline work on Eastside Road	Summer	2012
Project construction ends	August	2012
Storage pond operational	Fall	2012

Source: CH2M HILL

Detailed sequencing for construction of the Project facilities would be determined by the contractor, and is anticipated to include the following activities:

- Mobilizing equipment and personnel.
- Installing erosion control measures and other temporary facilities.
- Grading the site access roads and staging areas. Gravel likely would be imported to create road foundation.
- Removing and clearing large vegetative material, and stockpiling the top 3 to 6 feet of topsoil from the footprint of the pond.
- Excavating the dam foundation and stockpiling in the pond footprint area.
- Constructing the outlet pipe beneath the dam and the associate intake and energy dissipation structures.
- Constructing the dam generally concurrent with excavating borrow material from the impoundment (pond) area.
- Installing the overflow pipeline and energy dissipater.
- Constructing other earthen embankments.
- Grading and applying crushed rock to the pond perimeter road and site access road.
- Installing the concrete road in the pond.
- Constructing the pump station.
- Excavating and installing the pipeline in Eastside Road and repaving the road.
- Placing and grading topsoil on dam face.
- Scarifying and recompacting the impoundment area.
- Installing the pond liner and, if included, the liner cover.
- Installing electrical and control systems and commissioning operational facilities.
- Removing and disposing remaining topsoil and other unused onsite materials.
- Reseeding/revegetating areas of temporary disturbance and installing screening landscaping along Eastside Road and at the east end of the pond.

- Installing site fencing.
- Demobilizing.

Earthwork activities would entail an estimated 590,000 cubic yards of cut and fill volume. It is anticipated that all material would be reused onsite except for approximately 20,000 cubic yards. Table 2-2 summarizes the estimated amounts of materials that would be generated and/or used to construct the Project.

TABLE 2-2
Estimated Construction Materials and Associated Truckloads

Construction Material	Cubic Yards	Truckloads
Tree clearing	7,500	375
Cut/Fill Volume	590,000	(onsite)
Other Imported Fill/Off-haul	20,000	1,000
Imported Filter/Drainage Materials	20,000	1,000
Imported Gravel Surfacing	3,800	375
Imported Riprap/Bedding	300	20
Concrete	1000	100
Pond Liner	106,000 (square yards)	30
Liner Cover (optional)	11,000	1,100
Pipe/Pump Station materials	--	200
Fencing	--	100
Total Truckloads		**3,200 without liner cover; 4,300 with liner cover**

Source: CH2M HILL

Concrete work would be completed for the inlet, outlet, and overflow structures and the access road inside the impoundment.

Three staging areas would be used during Project construction (see Figure 2-4). The lower staging area nearest Eastside Road would be about 175 feet long, 100 feet wide at its widest point, and 35 feet wide at the narrowest point, providing approximately 7,600 square feet of usable area. This area would be used for parking. The middle staging area would be approximately 130 feet long by 100 feet wide, with about 12,700 square feet of usable area. This area has been configured to avoid a nearby wetland. The largest staging area is the furthest inside the parcel boundary and would be approximately 230 feet long by 155 feet wide with a usable area of about 27,000 square feet.

Equipment to be used during construction would be typical for land clearing and earthwork activity: backhoe, wood chipper/grinder, compactor, crane, dozer, dump truck, generator, water truck, and others. Equipment would be stored and refueled at one of the three onsite staging areas. To protect local habitat, equipment would be cleaned using industry best management practices (BMPs) prior to being brought to the Project site and before being

removed from the site. No blasting or major noise generating equipment such as pile drivers or aggregate crushing machines are expected to be used for this Project.

An average of approximately 20 construction workers would drive to the construction site each day; a peak construction month could involve up to 60 workers. During the winter months, only a few (two to three) workers are anticipated to be on the Project site. Onsite parking would be provided at the general staging area noted above as well as near the pump station location, as shown on Figure 2-4. The construction site would be accessible at the existing main entrance and at the pump station location.

Approximately one-half mile of Eastside Road would be closed for approximately two months during installation of the pipeline; a detour would be provided. A minimum of one lane would remain open on Trenton-Healdsburg Road during pipeline construction.

2.4.6 Project Mitigation Implementation

As mitigation for impacts to oak woodland and intermittent drainages, various habitat preservation and restoration activities would be implemented. Specific mitigation activities are detailed in Section 3.2 and are summarized below.

- To the extent feasible, construction areas where native tree removal occurred, not including areas occupied by permanent facilities, will be replanted with native seedlings, generally of the same species as the removed trees. The replanting process will begin as soon as construction-related activities are completed. A multi-year maintenance and monitoring program will be implemented to ensure adequate survival of replanted trees.
- Placement of a portion of the Town-owned parcel, around and to the north of the pond, into a preserve to protect existing trees and drainages.
- Construction of one or more projects offsite to enhance and/or restore creeks/drainages will be completed to compensate for impacts to existing drainages. Potential types of projects include habitat or water quality improvement projects. Possible locations for mitigation projects would be focused as feasible within the Mark West watershed and on parcels owned by the Town or other public entities.

2.5 Required Approvals

The Project requires approvals from several local, state and federal agencies. Brief summaries of the agencies that may have jurisdiction over the Project are provided below.

2.5.1 Town of Windsor

The California Environmental Quality Act (CEQA) applies to all discretionary activities proposed to be carried out or approved by California public agencies, including state, regional, county, and local agencies, unless an exemption applies. A Lead Agency is the California government agency that has the principal responsibility for carrying out or approving a project. For this Project, the Lead Agency is the Town of Windsor, which will be responsible for certifying this SEIR.

Other required Town approvals include a tree removal permit pursuant to Town of Windsor Zoning Ordinance Chapter 27.36 (Tree Preservation and Protection) and the Town of Windsor *Tree Technical Manual* (Town of Windsor, 2003). The zoning ordinance also provides guidance for determining replanting requirements for protected trees that require removal for a development project. More detailed standards and specifications for protecting and replanting trees are included in the *Tree Technical Manual*.

2.5.2 Sonoma County

The Tree Protection and Replacement Ordinance (No. 4014) of the County of Sonoma is similar to the preservation and protection standards in the Town of Windsor Zoning Ordinance, but applies to trees located on County lands outside of incorporated city limits. The County of Sonoma (Ordinance No. 4991) requires mitigation for removal of any large valley oak (diameter at breast height [dbh] greater than 20 inches), or any group of small valley oaks having a cumulative dbh greater than 60 inches. Mitigation for large and small valley oaks are dependent on size of tree, and may be in the form of (1) tree replacement by planting valley oak seedlings on the subject property or on another site in the county having the geographic, soil, and other conditions necessary to sustain a viable population of valley oaks, (2) retaining other valley oak trees on the subject property, (3) a combination of measures (1) and (2), or (4) paying an in-lieu fee, which shall be used exclusively for valley oak planting programs in the county. Chapter 26D of the Zoning Regulations requires a permit for removal of or damage to a heritage or landmark tree, as designated by the Sonoma County board of supervisors.

2.5.3 California Department of Fish and Game (CDFG)

The California Endangered Species Act (CESA) generally parallels the main provisions of the Federal Endangered Species Act (FESA), but unlike its federal counterpart, CESA applies the take prohibitions to species proposed for listing (called "candidates" by the State). Section 2080 of the Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects. Because CDFG is a trustee and responsible agency under CEQA, lead agencies are required to consult with CDFG to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat. CDFG also ensures that actions are in compliance with the California Fish and Game Code for habitat and wildlife protection. A streambed alteration agreement from CDFG under California Fish and Game Code Section 1602 for impacts to the intermittent drainages may be required prior to site development.

2.5.4 North Coast Regional Water Quality Control Board (RWQCB)

A Water Quality Certification or Waiver pursuant to Section 401 of the Clean Water Act (CWA) is required for Section 404 permit actions (see discussion below in Subsection 2.5.8 regarding U.S. Army Corps of Engineers [USACE] jurisdiction); this certification or waiver is issued by the applicable Regional Water Quality Control Board—in the case of this Project, the North Coast Regional Water Quality Control Board (RWQCB). Dredge or fill

activities that may result in a discharge to "Waters of the State" are also regulated by the RWQCB under its state authority provided by the Porter-Cologne Act in the form of Waste Discharge Requirements or Waiver of Waste Discharge Requirements.

The RWQCB also implements water-quality regulations in compliance with the NPDES program. Construction activities for this Project would need to comply with the California Stormwater NPDES General Construction Permit for discharges of stormwater runoff associated with construction activity. The Project applicant must submit a Notice of Intent (NOI) to the State Water Resources Control Board (SWRCB) to be covered by the State's General Permit for construction activities or negotiate a Project-specific Stormwater NPDES permit with the RWQCB prior to initiating construction.

Because the area of construction is greater than 1 acre, the General Permit for construction requires the implementation of a Stormwater Pollution Prevention Plan (SWPPP), which must be prepared before construction begins. The SWPPP will include:

- Specifications for BMPs that will be implemented and maintained during Project construction to minimize the potential for erosion/sedimentation and accidental releases of potentially hazardous materials and to minimize runoff from the construction areas, and will include storage, maintenance, and building materials laydown areas.
- A description of a plan for communicating appropriate work practices to field workers.
- A plan for monitoring, inspecting, and reporting any release of hazardous substances.

During construction, the RWQCB will oversee and inspect the Project for the SWRCB.

2.5.5 California Division of Safety of Dams (DSOD)

The DSOD is responsible for the supervision of the construction, enlargement, alteration, repair, maintenance, operation and removal of dams and reservoirs for the protection of life and property. Construction of any new dam or reservoir cannot begin until the owner has applied for and obtained written approval of the plans and specifications from the DSOD. The approval process begins with an application that is submitted to the DSOD by the owner of the dam or reservoir. In addition to basic information regarding the planned dam and reservoir (e.g., type, size, and height of dam and reservoir storage capacity), the DSOD also requires documentation of the site geology, methods used to explore the planned site, expected subsoil and foundation conditions, the materials that will be used in construction, as well as other pertinent information.

Upon receipt of the application, the DSOD will begin its review of the plans and specifications and the other information that is provided. After the DSOD grants their approval, actual construction of the dam must begin within one year after the date of the approval; otherwise, the approval becomes void. DSOD will also inspect the Project during construction. Filling of the pond for use is contingent on DSOD's review and acceptance of the completed construction and associated documentation regarding construction, planned operations and dam-safety monitoring.

2.5.6 California Department of Forestry (CDF)

Timber harvesting in California is overseen by multiple state agencies to address the variety of potential impacts logging has on the environment. The process starts with the preparation of a Timber Harvesting Plan (THP) by a private registered professional forester who submits the plan to the CDF for review. The CDF coordinates the THP review process with the Departments of Conservation and Fish and Game, and Regional Water Quality Control Boards.

The THP is an environmental review document, often considered the functional equivalent of an EIR (University of California, 2008). A THP protects the site and its surrounding environment from damage during timber harvest. It clearly defines the types of activities proposed, when and how they will be performed, and includes mitigation measures to reduce environmental impacts.

A certified professional forester reviewed the proposed Project and the Project site and determined that a THP would not be required for the Project (Williams, 2008). This determination has been recommended to CDF.

2.5.7 United States Fish and Wildlife Service (USFWS)/National Oceanic and Atmospheric Association National Marine Fisheries Service

The FESA protects plants and wildlife that are listed as endangered or threatened by the USFWS and the National Oceanic and Atmospheric Association National Marine Fisheries Service (NOAA Fisheries Service). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS/NOAA Fisheries Service may issue an incidental take statement allowing take of the species that is incidental to another authorized activity provided the action will not jeopardize the continued existence of the species.

2.5.8 United States Army Corps of Engineers (USACE)

The CWA was created to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" without a permit from USACE. The definition of waters of the United States includes rivers, streams, estuaries, territorial seas, ponds, lakes and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] 328.3 7b). Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. If the USACE determines that jurisdictional wetlands are affected by the proposed Project, a permit under Section 404 of the CWA will be required.

2.6 References

Brelje & Race. 2001. *Town of Windsor Water Reclamation Master Plan for Treatment, Storage and Disposal*. Adopted by the Town of Windsor. December.

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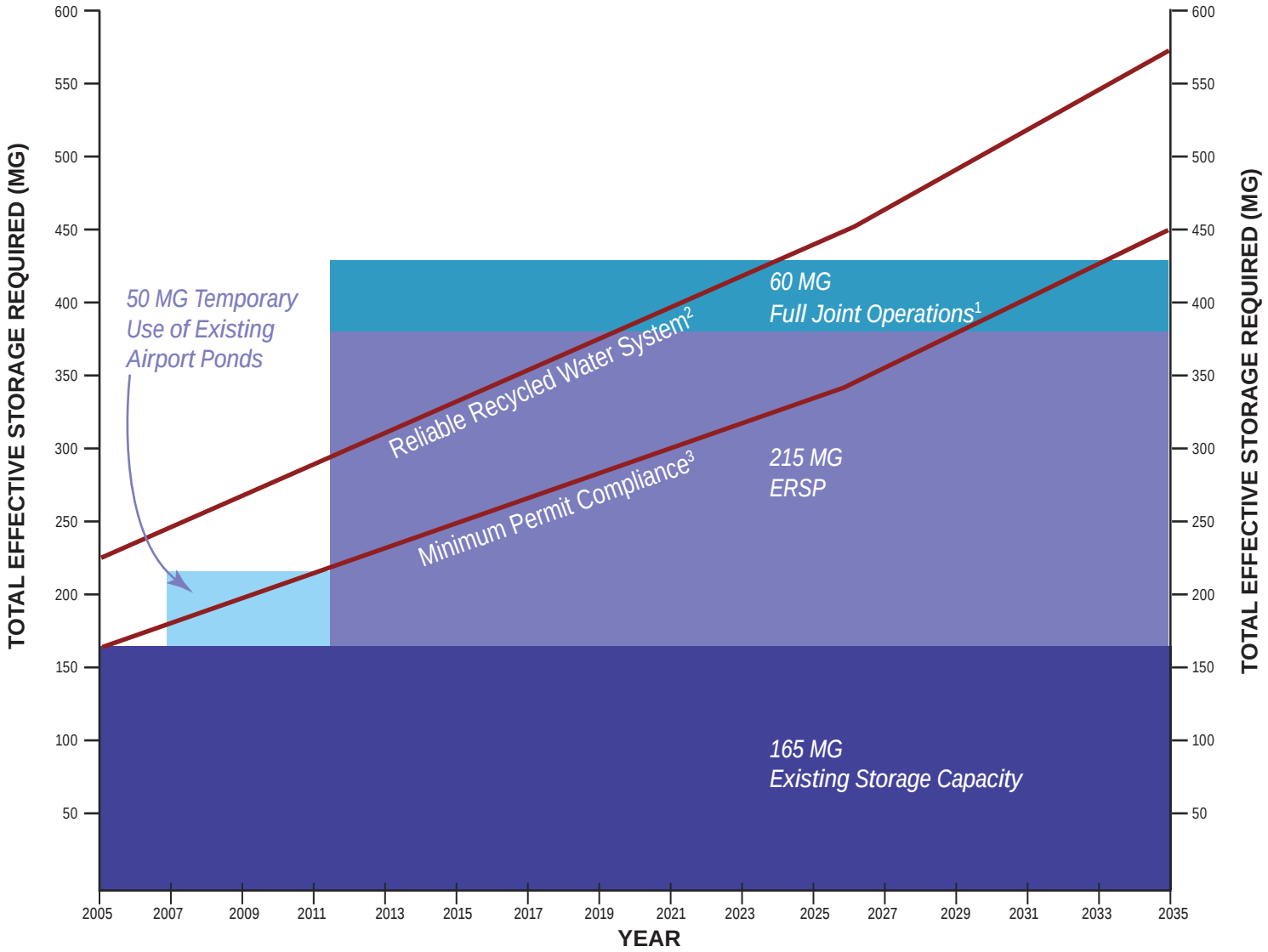


NOTES:

1. Full Joint Operations is the condition where the Town of Windsor, the Sonoma County Water Agency, and perhaps the City of Santa Rosa would be able to share recycled water storage and/or irrigation capacity. For full Joint Operations to ocur, a number of actions would need to be taken including construction of interconnection facilities and establishing a joint operation agreement.

2. Reliable Recycled Water System storage is defined as the amount of effective storage needed to reliably meet the Town's storage requirements for various annual weather conditions and other uncertainties impacting the operation of the recycled water system.

3. Minimum Permit Compliance is the amount of effective storage to meet the Town's discharge permit requirements.

Source: CH2M HILL, 2008

FIGURE 2-1
SEASONAL STORAGE NEEDED FOR COMPLIANCE AND RELIABILITY
EASTSIDE ROAD STORAGE PROJECT
TOWN OF WINDSOR
SONOMA COUNTY

WB022008003RDD_2-1 (5/20/08)

CH2MHILL

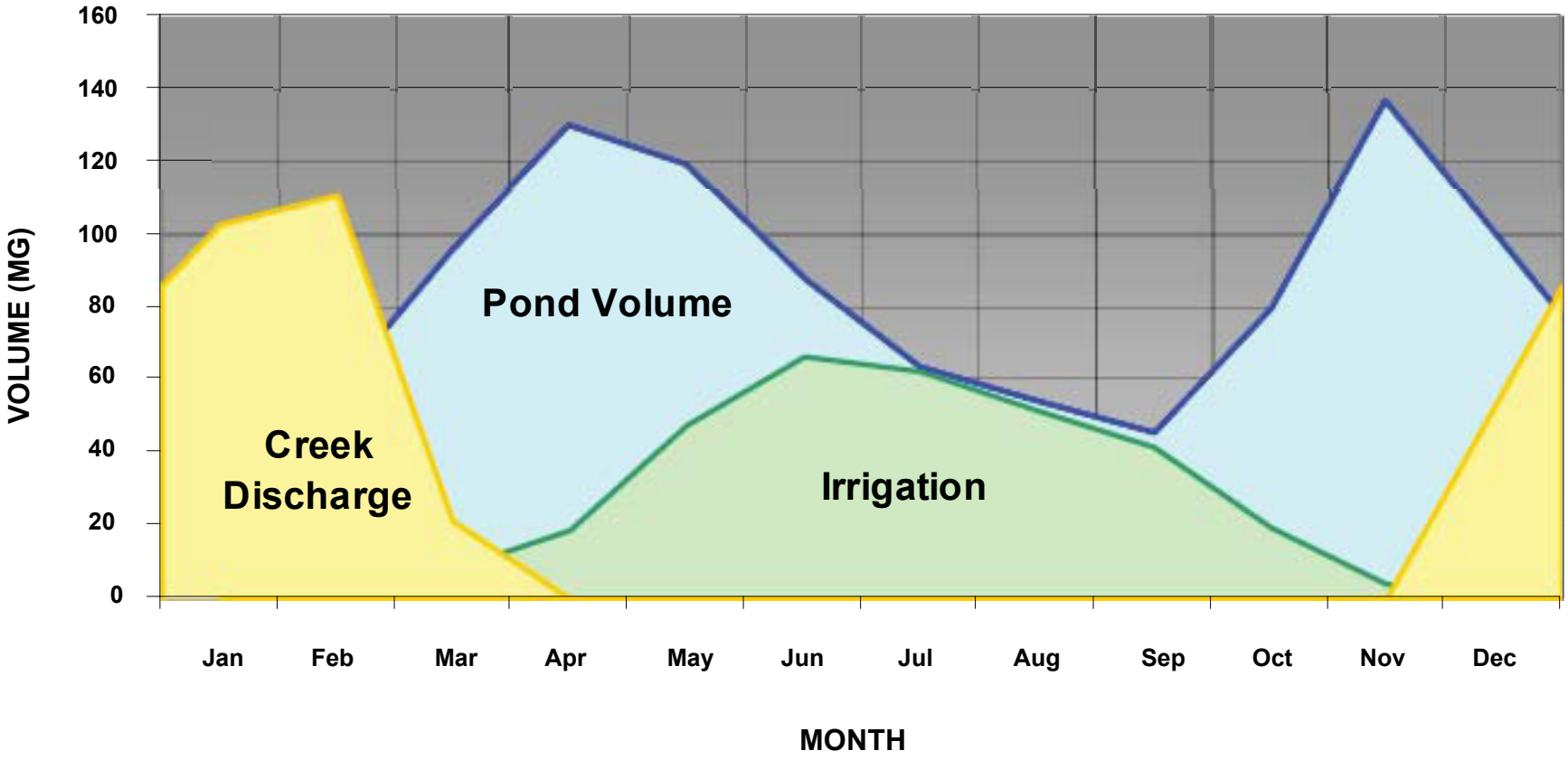
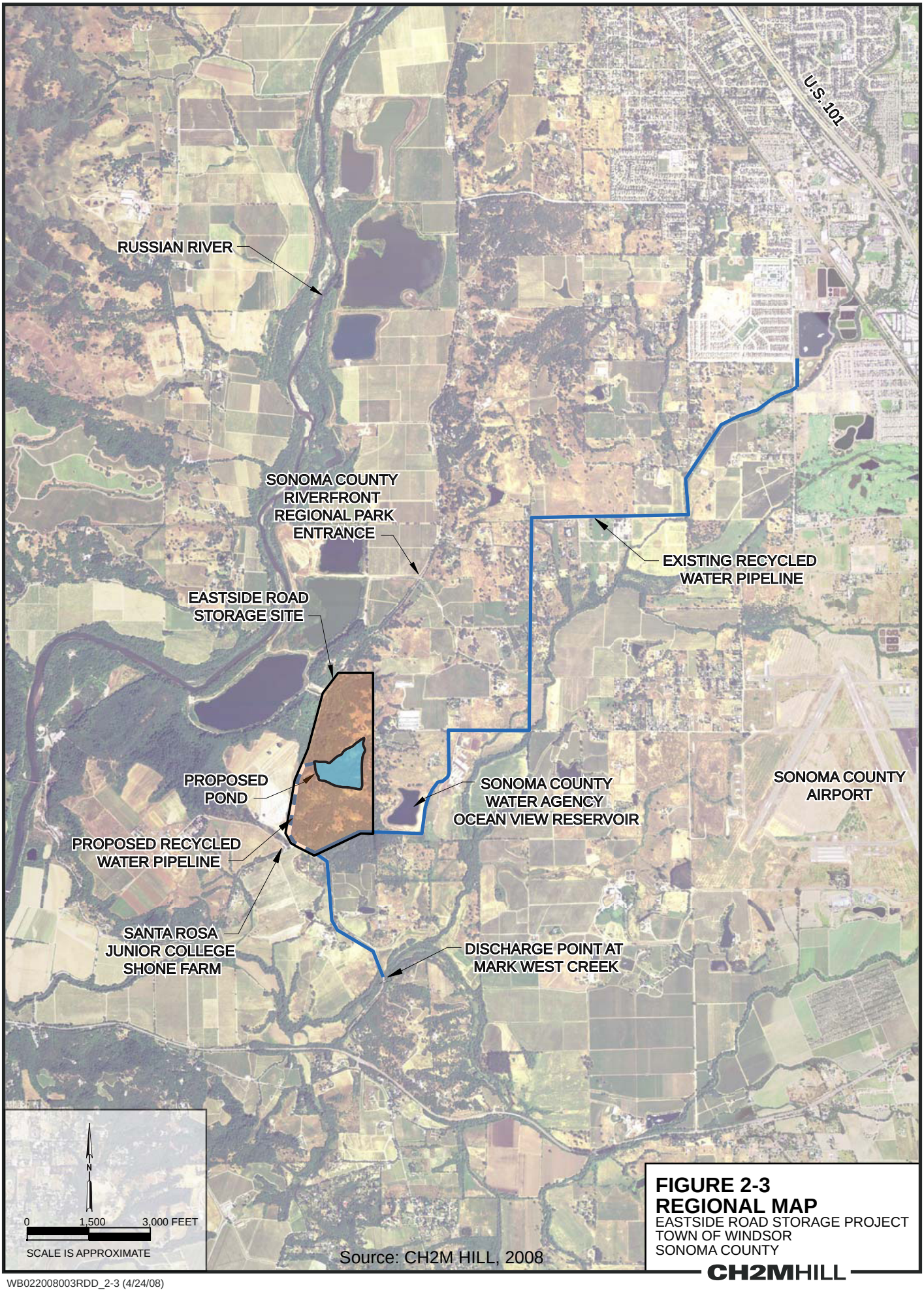


FIGURE 2-2
RECYCLED WATER IRRIGATION, DISCHARGE, AND RESULTING STORAGE
EASTSIDE ROAD STORAGE PROJECT
TOWN OF WINDSOR
SONOMA COUNTY

Source: CH2M HILL, 2008



Source: CH2M HILL, 2008

FIGURE 2-3
REGIONAL MAP
EASTSIDE ROAD STORAGE PROJECT
TOWN OF WINDSOR
SONOMA COUNTY

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WB022008003RDD_2-3 (4/24/08)

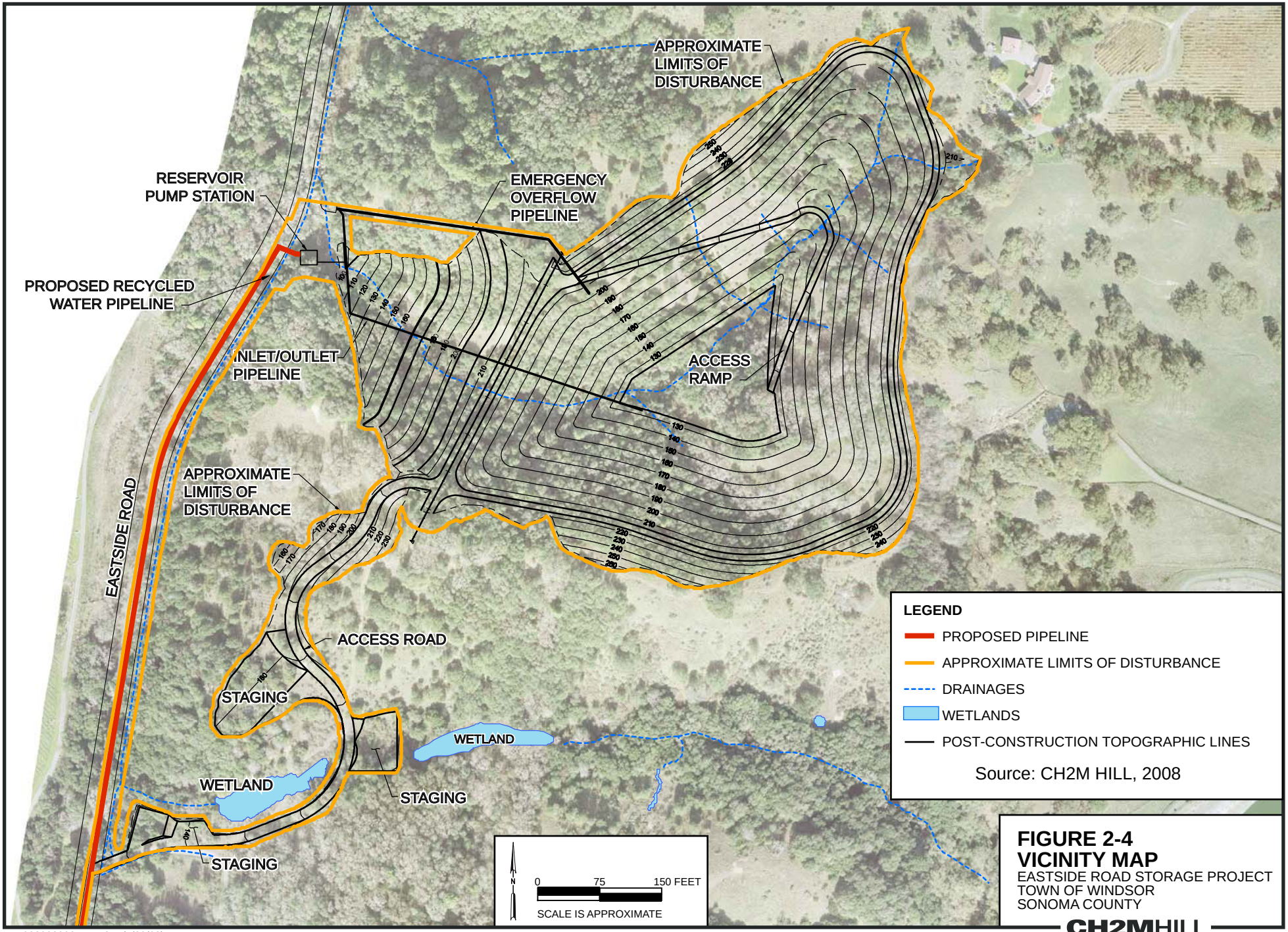

FIGURE 2-4
VICINITY MAP
EASTSIDE ROAD STORAGE PROJECT
TOWN OF WINDSOR
SONOMA COUNTY

CH2MHILL

WB022008003RDD_2-4 (5/20/08)

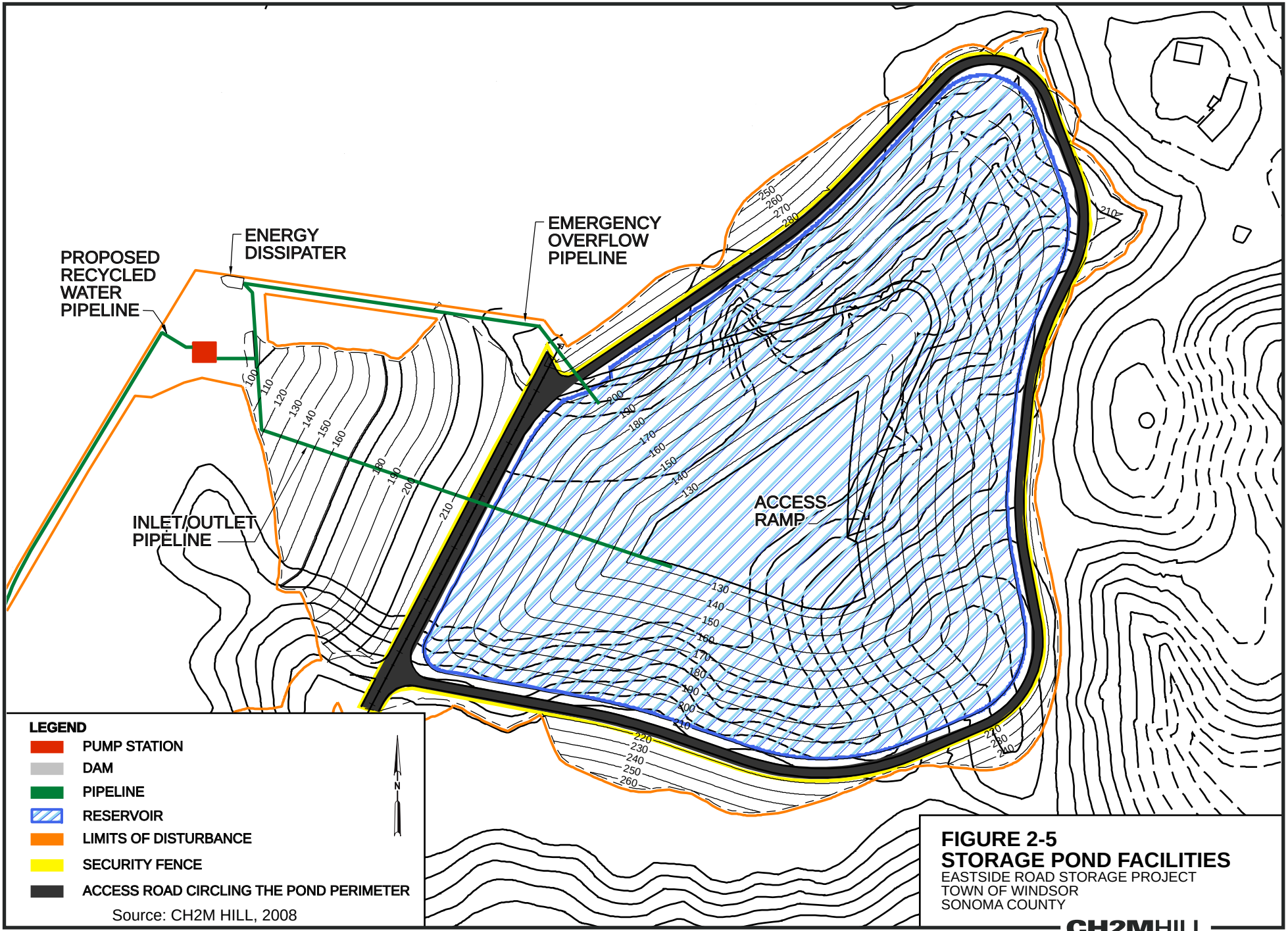

FIGURE 2-5
STORAGE POND FACILITIES
EASTSIDE ROAD STORAGE PROJECT
TOWN OF WINDSOR
SONOMA COUNTY

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WB022008003RDD_2-5 (5/21/08)