California Regional Water Quality Control Board
Santa Ana Region

June 29, 2007

ITEM: 12

SUBJECT: Order No. R8-2007-0018, Homeland-Romoland ADP Corporation, Inc., Homeland-Romoland Master Drainage Plan, Phase 1, Communities of Romoland and Homeland, Riverside County

SUMMARY

The matter before the Board is to consider adoption of Order No. R8-2007-0018, authorizing the discharge of fill to waters of the State that have been determined to be outside of the U.S. Army Corps of Engineers jurisdiction and not subject to regulation under Clean Water Act Section 404 (non-federal waters). The discharges will occur as part of the construction of drainage facilities for Phase 1 of the Homeland and Romoland Master Drainage Plans (collectively referred to as the Homeland-Romoland Master Drainage Plan or MDP). Phase 1 of the MDP represents the main elements of a municipal separate storm sewer system (MS4) that will be operated by the Riverside County Flood Control and Water Conservation District (District). MDP Phase 1 facilities (and subsequent phases) will convey discharges from existing and future development in the MDP's 13.8-square mile tributary area into the lower reach of the San Jacinto River and thence into Canyon Lake. Runoff in the area affected by the proposed MDP is currently generally shallow sheet-flow that is not confined within contiguous defined drainage channels.

BACKGROUND

California Water Code (CWC) Section 13376 states that, "any person discharging dredge or fill material or proposing to discharge dredged or fill material into the navigable waters of the United States within the jurisdiction of this state shall file a report of the discharge in compliance with Section 13260." Section 13260(a) of the CWC requires that any person discharging waste or proposing to discharge waste within any region, other than to a community sewer system, that could affect the quality of the waters of the State, file a report of waste discharge (ROWD). Under federal Clean Water Act (CWA) Section 401, every applicant for a federal permit or license for any activity that may result in a discharge to waters of the United States must obtain State Water Quality Certification (Certification) that the proposed activity will comply with state water quality standards.

Most Certifications are issued in connection with U.S. Army Corps of Engineers (Corps) CWA Section 404 permits for dredge and fill discharges. The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards administer the Certification program in accordance with the requirements of California Code of Regulations Title 23, section 3830 et seq. Since November 2003, all Certifications have been issued by the Executive Officer accompanied by authorization to discharge in accordance with State Water Resources Control Board Order No. 2003-0017-DWQ (Order No. 2003-0017-DWQ), "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification." In the absence of the need to obtain a Certification, the SWRCB has asserted its authority to regulate discharges of dredge and fill to waters of the State under the Porter-Cologne Water Quality Control Act. On May 4, 2004, the State Water Resources Control Board issued Water Quality Order No. 2004-0004-DWQ, "Statewide General Waste Discharge Requirements for Dredge and Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction (Order No. 2004-0004-DWQ). Numeric impact thresholds limit the application of Order No. 2004-0004-DWQ to relatively small discharges of fill.

PROJECT DESCRIPTION

On September 18, 2006, Regional Board staff received a report of waste discharge (Report) from Glenn Lukos Associates (GLA), submitted on behalf of the Homeland-Romoland ADP Corporation, Inc., a consortium of developers and property owners requesting authorization to discharge fill to waters of the State in association with the development of Phase 1 of the Homeland-Romoland Master Drainage Plan (MDP). Phase 1 of the MDP represents 13 miles of master-planned drainage facilities affecting a 13.8-square mile watershed. The watershed encompasses a portion of the City of Perris, the unincorporated community of Homeland, and a portion of the unincorporated community of Romoland[1]. The Phase 1 drainage facilities will ultimately be owned and operated by the Riverside County Flood Control and Water Conservation District (District) and will become part of their municipal separate storm sewer system (MS4). The Phase 1 drainage facilities will ultimately discharge into the San Jacinto River approximately 1.5 miles upstream from Canyon Lake.

Phase 1 of the MDP consists of the construction and subsequent maintenance of the following elements represented in Table 1 below (see Exhibit 1, Sheets 1 through 3, for a graphical representation of these facilities).

[1] For comparison purposes, the City of Calimesa is approximately 14.8 square miles.

Table 1: Summary of project elements of Phase 1

Facility	Description
Briggs Road Basin	A 40-acre detention basin with a 400 acre-foot storage capacity.
Juniper Flats Basin	A 28-acre detention basin with a 130 acre-foot storage capacity.
Line 1	A combination underground storm drain line and open concrete-lined channel connecting the Briggs Road and Juniper Flats Basins.
Line A	A combination of underground storm drain line, open concrete-lined channel, and earthen channel connecting Briggs Road Basin to the San Jacinto River. The lower reach of Line A, downstream from (west of) Interstate 215 will be an earthen channel.
Line A-3	A combination of underground storm drain line and open concrete-lined channel, tributary to Line A.
Line A-2	An open concrete-lined channel, tributary to Line A.

The remaining project elements of the MDP consist of Line B, Lines B-1 through B-5, Lines A-3 through A-18, and various other underground storm drainage facilities shown in Exhibit 1. These remaining storm drainage facilities would be constructed along with development of the watershed through conditions placed on specific development projects.

The primary purpose of the MDP is to provide flood control infrastructure that will confine the runoff from a 100-year storm event within the proposed drainage facilities, thereby reducing the 100-year flood plain in the Line A watershed. Flows from the tributary area of Line A generally manifest as shallow sheet-flow that is not confined within contiguous defined drainage channels. Construction of the MDP elements would confine the Line A floodplain within the constructed channels thereby eliminating a significant impediment to development of a large portion of the tributary area of the MDP. The MDP was adopted by the District in April 1988.

Implementation of the MDP, particularly Phase 1, would not address flooding in the San Jacinto River flood plain. The San Jacinto River flood plain would be confined as part of the separate, but coordinated, implementation of the San Jacinto River Master Drainage Plan, originally adopted by the District in September 1987. This project would involve widening the River channel and lowering the elevation of the bed 8 to 10 feet in the vicinity of the confluence with Line A at a later time. Lowering the elevation of the San Jacinto River would require additional work on the portion of Line A west of the I-215 in order to

match the elevation of the bed of Line A with the new elevation of the bed of the San Jacinto River. The ultimate channel configuration of both Line A west of I-215 and the San Jacinto River would be earthen channels. Line A would require routine maintenance in order to maintain its hydraulic capacity.

PROPOSED DISCHARGES OF FILL

In their Report, GLA provided a delineation of waters of the U.S. that concluded that the site did not contain Corps jurisdictional waters that would be subject to discharges of fill during implementation of the Plan. However, GLA did identify ephemeral drainages that are outside of the jurisdiction of the U.S. Army Corps of Engineers (Corps) because the drainages are isolated from navigable waters. Such isolated waters are considered outside of the Corps' jurisdiction for the reasons set forth in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). A total of 0.87 acres of isolated, non-federal waters of the State are proposed to be filled as a result of the project. None of the waters are wetlands.

Upon review of the Report, Regional Board staff determined that the discharges to the non-federal waters of the State from Phase 1 of the MDP would affect beneficial uses and that the Regional Board could not authorize the proposed discharges in accordance with Order No. 2004-0004-DWQ because the discharges exceeded the impact thresholds of that Order. Discharges of fill to waters of the State within the Project are not subject to Corps permitting and, therefore, do not require the discharger to obtain a Clean Water Act Section 401 Certification. The proposed Order No. R8-2007-0018 does not authorize discharges of storm water or process wastewater.

The waters that will receive discharges of fill consist largely of ephemeral drainages that are intersected by the Phase 1 drainage facilities. These drainages lie within the floodplain of Line A. The floodplain of Line A is wide and shallow, but does not concentrate flows such that a discernable drainage course connects the isolated waters to the San Jacinto River.

The isolated drainages largely are earthen drainage channels sparsely vegetated by non-native herbaceous plants. Very sparse scatterings of native riparian vegetation exist in a few of the channels. There exists one, genuinely riparian drainage that will be filled as part of the construction of the Briggs Road Basin. In addition, one man-made wetland will be impacted by the construction of Line A. However, this wetland is "accidental" according to the California Wetlands Conservation Policy and Regional Board staff does not believe that the "no-net-loss policy" should apply to the fill of this wetland. The beneficial uses that will be affected by the proposed discharge are:

a. Municipal and Domestic Supply (MUN)

b. Non-Water Contact Recreation (REC2)
c. Wildlife Habitat (WILD)

The discharger has proposed to compensate for impacts to beneficial uses through the payment of an in-lieu fee to the Santa Ana Watershed Association towards the eradication of 2.61 acres of non-native invasive plant species in riparian areas. The total area proposed for fill is 0.87 acres, including 0.01 acres of the "accidental" wetland. In comparison, 68-acres of constructed basins are proposed as part of Phase 1. In consideration of the discharger's proposed contribution, the quality of beneficial uses within the channels proposed for fill, and the drainage channels and basins proposed as part of the construction of the Phase 1 drainage facilities, Regional Board staff believes that the discharger has proposed adequate compensation for direct impacts to beneficial uses on a per-acre basis[2].

CUMULATIVE CONSIDERATIONS

Pursuant to the California Environmental Quality Act (CEQA), the District prepared and certified an Environmental Impact Report (EIR) for the MDP. The District filed a Notice of Determination on April 3, 2006. The District's EIR evaluates the various environmental impacts of the proposed drainage facilities. The District concluded that the impacts of pollutants in storm water runoff would be less than significant, on the basis of the implementation of current regulatory programs. In their Initial Study for the EIR, the District also concluded that there would be no significant impacts to groundwater supplies. Regional Board staff has read and considered the environmental analysis presented in the District's EIR. The following additional water quality impact analysis supplements the analysis provided in District's EIR.

The direct impacts of the proposed discharge of fill on water quality are limited, but in consideration of the whole of the project and its relationship to subsequent projects and activities in the area, the project has considerable ramifications that warrant further discussion. The project will confine the floodplain of a 13.8-square mile area and thereby remove an impediment to development. Consequently, the project may initiate long-term indirect and cumulative impacts on surface and groundwater hydrology and water quality in receiving waters. These impacts are: 1) the introduction of daily nuisance or dry-weather flow to Line A and the receiving reach of the San Jacinto River; 2) hydro-modification of

[2] During their review of this Staff Report, District Staff requested that the Board document a policy that maintenance activities within the MDP facilities would not trigger the need for additional compensatory mitigation for impacts to beneficial uses that are affected in the course of normal routine activities. Board staff concurs with the underlying principal that normal routine maintenance should not trigger the need for compensatory mitigation. However, Board staff believes that such a policy is better more fully developed in a broader forum. Currently, Board staff is in discussions with flood control districts' staff regarding the issuance of comprehensive maintenance permits.

the receiving reach of the San Jacinto River; 3) cumulative pollutant loading into the receiving reach of the San Jacinto River and Canyon Lake; and 4) impacts on groundwater supplies and quality.

Discharges of Nuisance Flow into Line A and the Lower Reach of the San Jacinto River

Discharges from landscape irrigation, vehicle washing, and other activities in the Line A watershed are likely to result in perennial nuisance flow in open channels of the MDP and in the receiving reach of the San Jacinto River. Similar changes in surface hydrology due to watershed development have been observed throughout the Santa Ana Region (e.g. Morning Canyon and Buck Gully – Newport Coast, Cooper's Creek - Beaumont, Cucamonga Creek - Rancho Cucamonga, etc.). These changes often affect changes in habitat types, such as willow scrub conversion into riverine wetlands. Typically, these habitat type conversions are from drier to wetter habitats as surface water hydrology becomes increasingly influenced by dry weather runoff from land developments. The introduction of nuisance flow into surface waters affects the growth of vegetation and subsequently the nature, quality, and emergence of beneficial uses, including Wildlife Habitat, Warm Freshwater Habitat, etc. Vegetative growth slows the flow of water in channels and streams and affects their hydraulic capacity.

Engineered channels are designed to have a particular *roughness*, or resistance to flow. This roughness comes from a variety of sources, including the composition of the bed and banks (i.e. concrete versus earthen) and, if earthen, the density of vegetative growth. In an earthen ephemeral stream, the introduction of nuisance flow from development in the watershed typically promotes the growth of dense riparian vegetation. This growth may result in overtopping the banks and local flooding if is has not been considered in the channel's design configuration. As a consequence, routine removal of riparian vegetation is needed in order to maintain the engineered channel's hydraulic capacity. As a result, any potential beneficial uses that could result from changes in watershed hydrology would not be fully realized. In the case of the MDP, dense riparian vegetation has not been considered in the channels' design, and therefore, maintenance activities, such as excavation and mowing, would be necessary to maintain the hydraulic capacity of open channels in the MDP and the San Jacinto River.

Hydro-modification

Master Drainage Plans are developed based on discharges from the 100-year storm event affecting the ultimate planned development of the tributary areas. Changes in pervious cover due to land development are included in the flow

calculations. Master Drainage Plans *accommodate* development-related hydro-modification by increasing the hydraulic capacity of receiving surface waters and providing for storm drainage infrastructure for future development at regional and sub-regional scales. In some cases, Master Drainage Plans completely replace natural drainage features with engineered facilities. In contrast, current waste discharge requirements for urban storm water runoff attempt to *prevent* the changes in watershed hydrology that necessitate Master Drainage Plans which are designed to increase the hydraulic capacity of their tributary area. As a result of this disconnect, flow limits on urban storm water runoff are unlikely to mitigate the impacts of Master Drainage Plans on beneficial uses.

Regional Board Order No. R8-2002-0011 (commonly known as the Riverside County Urban Storm Water Runoff Permit, the municipal separate storm sewer, or MS4, permit for that part of Riverside County in the Santa Ana Region) limit the rates, velocities, durations, and volumes of storm water runoff from development projects in proximity to receiving waters that may be sensitive to such discharges. These MS4 permit requirements would, in theory, protect such receiving waters from erosion and destabilization as well as the need to armor them in such ways that would impair their beneficial uses (e.g. full concrete-lining). The impacts of hydro-modification on natural stream systems are typically most prevalent at lesser storm events (up to 10 year return period); extreme storm events (e.g., 100-year) result in extensive hydro-modification but are so rare that the impacts are considered relatively negligible (the sum of the effects of smaller events typically represents more than 90% of the hydro-modification of stream systems). As a result, the MS4 permit requirements address changes in storm water runoff from 2-year, 5-year, and 10-year events. The MS4 permit requirements do not address situations where a Master Drainage Plan has been developed to reduce a floodplain with engineered channels.

Design discharges from Line A will reduce the peak discharge of runoff from the 100-year storm event from an existing flow of 5,168 cubic feet per second (cfs) to 3,673 cfs at the Interstate 215 (I-215) crossing[3]. This reduction is accomplished through the proposed detention basins. The volume of storm water runoff is anticipated to *increase* by 286 acre-feet from the 100-year storm event as the result of increased impervious area from development of the tributary area. In comparison, the 100-year storm water runoff volume in the San Jacinto River is 45,500 acre-feet and the volume contributed by Line A would represent a 0.63% increase.

Flow limits imposed on new development projects in the tributary area of Line A in response to MS4 requirements are likely to be inconsequential in protecting the beneficial uses of the receiving reach of the San Jacinto River against hydro-

[3] The capacity of the culverts under I-215 are a limiting factor for the design flow of the Homeland-Romoland drainage facilities. The culverts cannot convey current 100-year peak flows so discharges are being reduced in order to prevent flooding of the freeway.

modification or allowing for potential beneficial uses to be realized by allowing the growth of riparian vegetation[4]. This is because any changes in flow induced by the MDP would be incorporated in the ultimate channel configuration design for the San Jacinto River. In other words, the potential increase in flow from the developed area (286 acre-feet), would be an insignificant quantity in the design of the ultimate channel configuration in comparison to its flow capacity of 45,500 acre-feet. The effort to reduce the flood plain dominates design considerations. This situation indicates how flow limits in urban storm water runoff permits do not address the impacts of hydro-modification caused by the implementation of Master Drainage Plans.

Pollutants in Discharges from the MS4

The Homeland-Romoland drainage facilities will convey pollutants from future urban development in the 13.8-square mile tributary area to the San Jacinto River and then to Canyon Lake. The future development includes three Specific Plans and 25 planned tracts affecting 6,500 acres, and potentially as many as 18,200 residences, in and around the tributary area. Pollutants in discharges of storm water from these projects are addressed under the municipal storm water runoff permit for Riverside County, Order No. R8-2002-0011 and adopted Nutrient Total Maximum Daily Loads (TMDLs).

Order No. R8-2002-0011 addresses pollutants in storm water runoff differently depending on the age of the project. A project received by the County of Riverside or the City of Perris prior to January 1, 2005 would not be required to prepare a Water Quality Management Plan (WQMP). These projects would be required to implement structural and non-structural BMPs under the April 1996 Supplement A to the 1993 Drainage Area Management Plan (DAMP). However, in part, due to its less formal, and consequently, less accountable approach to structural BMP selection, the Supplement A implementation is not as effective as the WQMP.

Regional Board staff has surveyed pending development projects entirely or partially within the 13.8 square mile drainage area in order to determine the manner in which pollutants in storm water runoff will be addressed under current requirements. These pending projects reflect many, but not all, future development in the drainage area. After reviewing information provided by the City of Perris and information in the County of Riverside's Geographic Information System (GIS), Regional Board staff identified approximately 102 pending development projects within the drainage area, including tract maps and parcel maps that have been received but not yet constructed. The results of the survey are summarized in Table 2, below.

[4] Reductions in flow, imposed on new development, could create unused hydraulic capacity in engineered channels. This capacity could then be taken up by allowing riparian vegetation to grow.

Table 2: Status of pending development projects in the Homeland/Romoland drainage plan area[5].

Total Number of Projects	Projects received prior to 1/1/2005 (DAMP projects)	Projects received after 1/1/2005 (WQMP projects)
102	76	26

The results of the survey indicate that approximately 26 projects would have pollutants in their discharges removed with both structural and non-structural best management practices (BMPs) developed under the WQMP. Approximately 76 projects would have pollutants addressed using BMPs developed according to Supplement A to the 1993 DAMP. Although two projects received Clean Water Act Certification by the Executive Officer, one of those projects was already subject to the WQMP. No specific information was provided regarding the dates that development projects in the City of Perris were received, however, based on information provided by the City, all pending and future projects are subject to the WQMP. Therefore, all projects in the City were presumed to have been received after January 1, 2005 and are reflected as such in Table 2.

The shortcomings of Supplement A to the 1993 DAMP are anticipated to be addressed in the upcoming renewal of Order No. R8-2002-0011. Regional Board staff expects to incorporate requirements that will make the permittees more accountable for the selection of BMPs, similar to the WQMP. The BMP selection process will likely be affected by the status of projects submitted prior to January 1, 2005, but the structural BMPs are expected to be more robust than they would be under the current DAMP.

Nutrient Total Maximum Daily Loads (TMDL) for Canyon Lake and Lake Elsinore, along with a plan for implementing the TMDLs, have been adopted by the Board (Order No. R8-2004-0037) and a pathogens TMDL for Canyon Lake is currently being developed. The nutrient TMDLs include Waste Load Allocations for urban land uses that must be attained by 2020. Urban land uses will be required to achieve load reductions to comply with the Waste Load Allocations. Implementation of the tasks identified in the TMDL Implementation Plan are expected to yield important strategies for addressing pollutant load contributions to Canyon Lake and Lake Elsinore from existing and future development in the greater San Jacinto watershed, which includes the Homeland-Romoland Area Drainage Plan project area.

The nutrient TMDLs do not account for changes in pollutant loading as a consequence of changing land use. As an example, as agricultural areas

[5] Because some properties may have multiple tract and/or parcel maps, these numbers are approximate.

convert to urban areas, that net pollutant loading to the lakes may be significantly reduced. However, land use changes from open space to urban areas are likely to result in net increases in pollutant loads. Natural background loading rates from open space areas are currently being assessed by the US Forest Service. Impacts of current and future efforts to implement source and treatment control BMPs on land use loading rates from implementation of Supplement A and/or the WQMP were not considered in the existing TMDLs or the models used to develop them. As a result, the net impact of future development in this project area is not known.

Ongoing data collection and modeling tasks required by the TMDL Implementation Plan will inform the issue of land development's impact on pollutant loading. These tasks will be completed by a Task Force made up of responsible parties. Individual dischargers are responsible for specific tasks as well. The completion of these tasks may also result in modifications to Waste Load Allocations within the next 3-5 years. Specifically, the nutrient TMDL Implementation Plan calls for development of a Canyon Lake Sediment Nutrient Treatment Evaluation Plan, a Lake Elsinore Sediment Nutrient Reduction Plan, and a pollutant trading program, as well as updates to water quality models. These tasks are designed to test preliminary assumptions regarding pollutant loading rates, identify best management practices (BMPs) necessary to mitigate excess pollutant loads, and identify alternative means of complying with TMDL Waste Load Allocations. Likely mitigation strategies include: construction of in-lake remediation measures such as aeration systems; plans to allow for pollution credits/debits for conversion of land use and/or credits for operation of the aeration system or similar in-lake remediation strategies; and identification of specific watershed-based BMPs to be used to mitigate any excess loading impacts of existing and future developments. Although the Task Force has not submitted any of these required plans on time, once these tasks have been completed, the dischargers will have until 2020 to attain compliance with assigned Waste Load Allocations.

The dischargers to Canyon Lake and Lake Elsinore, including the County of Riverside, have submitted schedules and initiated work necessary to complete TMDL Implementation Plan Tasks. Due to the difficulty with treating nutrients (most likely, BMPs will involve bio-filtration and/or infiltration), any BMPs implemented are also likely to be effective at significantly removing many other pollutants of concern associated with urban runoff.

According to the Riverside County Flood Control and Water Conservation District's adopted final EIR for the MDP, the District does not contemplate operating Line A, or any other element of the Homeland-Romoland drainage facilities, as a regional or sub-regional storm water treatment facility.
Each development project in the tributary area is generally anticipated to be conditioned by either the County of Riverside or the City of Perris to treat their own storm water runoff pursuant to applicable waste discharge requirements for

urban storm water runoff. During a meeting with District staff and their representatives on February 19, 2004, Regional Board staff had requested that portions of the MDP be considered for operation as regional or sub-regional storm water treatment facilities. Regional Board staff provided comments on the District's Notice of Preparation for the EIR on January 6, 2004 and on the draft EIR on November 16, 2005, in part, repeating our February 19, 2004 request.

The District has indicated that future modifications to MDP facilities would be considered to incorporate regional BMPs necessary to assist urban and/or other land uses with attaining compliance with TMDL Waste Load Allocations. However, the District has given priority to in-lake remediation measures, based on their cost-effectiveness assessments. If in-lake measures fail to meet TMDL requirements, final decisions on alternatives and options would occur pending the results of current TMDL monitoring, modeling, and treatment facility effectiveness analyses. Interest from other dischargers in funding such efforts would also be a factor.

Cumulative Impacts on Ground Water Quality

The vast majority of the 13.8-square mile tributary area overlies the Perris South groundwater management zone (previously known as groundwater sub-basin). According to the Updated Total Dissolved Solids (TDS) and Nitrogen Management Plan, adopted by the Regional Board and incorporated into the Basin Plan with Resolution No. R8-2004-0001, Perris South lacks assimilative capacity for both Nitrogen and TDS.

Northeast of Perris South lies the Lakeview/Hemet North groundwater management zone. The Perris North groundwater management zone lies north of Perris South. Perris North incorporates Lake Perris, which was constructed between 1970 and 1974 to receive State Water Project water. Water impounded in this reservoir has saturated the engineered fill that forms the foundation of the Lake Perris Dam and is infiltrating into Perris North, driving a hydraulic gradient that moves water into Perris South. This gradient, along with the lack of groundwater extraction in Perris South due to poor water quality therein, has resulted in rising groundwater elevations in Perris South. Rising groundwater in Perris South and extractions in the adjacent Lakeview/Hemet North groundwater management zone have resulted in a gradient that moves poor quality groundwater in Perris South toward higher quality groundwater in Lakeview/Hemet North. Historically, groundwater flowed in the opposite direction.

Although the future of Lake Perris was recently called into question as the result of seismic concerns over the Lake Perris Dam, the Department of Water Resources is determined to repair the Dam. In the interim, the elevation of the

Lake has been lowered, but the trends in groundwater movement due to presence of the reservoir and dam are expected to continue.

Eastern Municipal Water District (EMWD), whose service area includes Perris North and South and the Lakeview/Hemet North groundwater management zones, has begun to implement a Groundwater Salinity Management Program that is also anticipated to affect groundwater movement. As part of the Groundwater Salinity Management Program, EMWD intends to construct three desalinization facilities (desalters) that will extract groundwater from Perris South. These facilities will provide potable water for EMWD ratepayers and reduce the migration of brackish water from Perris South to Lakeview/Hemet North. Two desalters have been constructed and the third is nearly complete.

The development of the 13.8-square mile tributary area of Line A will negatively affect the volume of groundwater recharge for Perris South. In the short-run, this negative affect would be beneficial because it could reduce the flow of brackish groundwater from Perris South into Lakeview/Hemet North. It could also slow the migration of pollutants, potentially present in the vadose zone from manure application and other farming activities, into the groundwater. In the long-run, however, the reduced volume of recharge would be an adverse affect.

Regional Board staff has been able to make a conservative estimate of potential groundwater recharge volume lost due to development, based on a worst-case scenario of a maximum impervious cover, despite a paucity of relevant data. Based on this scenario, development in the Line A floodplain may reduce groundwater recharge from local precipitation on average as much as 600 acre-feet per year for the tributary area. The variability of this reduction in recharge, based on historic highs and lows in the rainfall record, may be as high as 1,100 acre-feet per year, or as low as 300 acre-feet per year.

This reduction in recharge is not considered a significant water quality impact relative to the impact of increased water demand. Annual groundwater production from the Perris South groundwater management zone was 2,286 acre-feet in the year 2005. Groundwater production is expected to be approximately 12,000 acre-feet by 2015 as the result of the operation of the desalters by EMWD. In addition, EMWD anticipates a projected population growth of 400,000 people within its 555-square mile service area, including the Homeland-Romoland Drainage Plan area, by the year 2030. This will require that EMWD increase its potable and non-potable water supplies by 106,200 acre-feet, an approximate 75% increase. Much of the water will be supplied by desalter facilities and by water imported from the State Water Project. Other portions will be supplied from the Colorado River and recycled water. Water supplied by local natural recharge of precipitation would not be a significant supply source, therefore, its loss is an adverse, but not a significant, water quality impact.

CONCLUSION

The purpose of Order No. R8-2007-0018 is to authorize the discharge of fill to 0.86 acres of isolated ephemeral drainages and 0.01 acres of "accidental" wetlands as part of the construction and subsequent maintenance of Phase 1 of the Homeland-Romoland Master Drainage Plan. As discussed above, the impacts to the beneficial uses of the affected waters are relatively benign and the discharger has proposed to adequately mitigate them. The long-term cumulative and indirect impacts of the whole of the project and development of the watershed on water quality vary and, in some cases, are potentially substantial. Those impacts are beyond the scope of this Order but are expected to be addressed through other Regional Board programs as described above.

RECOMMENDATION

Board staff recommends that the Regional Board adopt Order No. R8-2007-0018.

Comments were solicited from the following agencies and parties:

U.S. Army Corps of Engineers, Los Angeles District
Department of Fish and Game
U.S. Fish and Wildlife Service
U.S. Environmental Protection Agency, Supervisor of the Wetlands Regulatory Office
State Water Resources Control Board, Department of Water Quality, Water Quality Certification Unit
Eastern Municipal Water District
Albert A. Webb Associates
Riverside County Flood Control and Water Conservation District

California Regional Water Quality Control Board
Santa Ana Region

Order No. R8-2007-0018

Waste Discharge Requirements

for

Homeland-Romoland Area Drainage Plan (ADP) Corporation, Inc.
Homeland-Romoland ADP, Phase 1
Communities of Romoland and Homeland,
Riverside County, California

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Board), finds that:

1. Homeland-Romoland ADP Corporation, Inc. (hereinafter, discharger) proposes to discharge fill material to 0.87-acres of ephemeral drainages within the Homeland-Romoland Master Development Project (MDP) Area, in the Communities of Romoland and Homeland, Riverside County, California. The discharges will occur as the result of the construction of Phase 1 of the Homeland-Romoland ADP. The Project is located within portions of Section 7, 8, and 18, Township 5 South, Range 2 West, and Sections 7, 8, and 13-17, Township 5 South, Range 3 West, as shown on the U.S. Geological Service *Romoland, Perris, and Lakeview, California* quadrangles.

2. The construction of Phase 1 of the Homeland-Romoland MDP will result in discharges of fill to waters of the State but not waters of the U.S. All affected drainages on site are isolated waters that do not have a surface connection to navigable waters under the Clean Water Act. As a result, discharges of fill to these features are not subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) for the reasons set forth in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.*

3. On January 9, 2001, the United States Supreme Court issued a decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (2001) 121 S. Ct. 675 (*SWANCC*) that held that the language of the Clean Water Act (CWA) cannot be interpreted as conferring authority for the federal government to regulate "isolated, intrastate, and non-navigable waters" merely because migratory birds may frequent them. The Court emphasized the states' responsibility for regulating such waters. Consequently, those isolated features are waters of the State but are not subject to the U.S. Army Corps of Engineers jurisdiction.

4. Impacts to waters of the U.S. are subject to the U.S. Army Corps of Engineers Clean Water Act Section 404 permits. Since no Corps jurisdictional waters are present on site, a Clean Water Act Section 401 Water Quality Standards Certification does not apply to the project.

5. The discharger has committed to mitigate direct impacts to waters of the State by paying a one-time in-lieu fee to the Santa Ana Watershed Association towards the eradication of invasive plant species in riparian areas.

6. The waste discharge requirements proposed herein address the fill of 0.87 acre of isolated waters of the State on site. This Order requires the discharger to proceed with the proposed mitigation.

7. In compliance with the California Environmental Quality Act, the Project applicant has prepared an Environmental Impact Report (EIR), which was certified by the County of Riverside on April 3, 2006. The Regional Board has considered the County's EIR in the adoption of these waste discharge requirements.

8. The Water Quality Control Plan for Santa Ana River Basin (1995) does not specifically designate beneficial uses for any of the isolated surface waters on the Project site. Based on Regional Board staff assessment of the site, the requirements of State Board Resolution No. 88-63, and the applicant's biological assessment, beneficial uses that are existing, attainable, or intermittent for these isolated waters include:

   a. Municipal and Domestic Supply (MUN)
   b. Non-Water Contact Recreation (REC2)
   c. Wildlife Habitat (WILD)

9. This Order regulates the discharge of fill material to waters of the State. The discharger submitted a Report of Waste Discharge on September 18, 2006.

10. Waste Discharge Requirements (WDRs) are necessary to address impacts of the fill of waters of the State.

11. The Regional Board has considered antidegradation pursuant to State Board Resolution No. 68-16 and finds that the discharge is consistent with those provisions.

12. The Board has notified the discharger and other interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for public hearing and opportunity to submit their written views and recommendations.

13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. DISCHARGE SPECIFICATIONS:

1. No activities associated with the project shall cause or threaten to cause a nuisance or pollution as defined in Section 13050 of the California Water Code.

2. The discharge of any substance in concentrations toxic to animal or plant life is prohibited.

3. The groundwater in the vicinity of the project shall not be degraded as a result of the project activities or placement of fill for the project.

4. The discharge of fill materials shall be limited to inert materials, as defined in Section 20230, Division 2, Title 27. The discharge of fill material other than native soil shall be only with the prior approval of the Executive Officer.

B. DISCHARGE PROHIBITIONS:

1. The direct discharge of wastes, including rubbish, refuse, bark, sawdust, or other solid wastes into surface waters or at any place where they would contact or where they would be eventually transported to surface waters, including flood plains, is prohibited.

2. The discharge of floating oil or other floating materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.

3. The discharge of silt, sand, clay, or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.

4. Discharges to surface waters of wastes or pollutants that are not otherwise regulated by a separate National Pollutant Elimination System (NPDES) permit, is prohibited.

C. PROVISIONS:

1. The discharger shall pay a one-time, in-lieu fee to the Santa Ana Watershed Association towards the eradication of 2.61 acres of invasive plant species in riparian areas. The in-lieu fee shall include a minimum of 5-years of follow-on maintenance. The discharger shall provide evidence of the payment to the Executive Officer not later than August 29, 2007.

2. The discharger shall maintain a copy of this Order at the site so that it is available to site operating personnel at all times. Key operating personnel shall be familiar with its content.

3. The discharger shall remove from the site any waste or fill material found to contain substances that may have a deleterious effect on water quality, and dispose of unacceptable wastes in a manner acceptable to the Executive Officer.

4. The discharger must comply with all of the requirements of this Order. Any violation of this Order constitutes a violation of the California Water Code and may constitute a violation of the CWA and its regulations, and is grounds for enforcement action, termination of this Order, revocation and re-issuance of this Order, denial of an application for re-issuance of this Order; or a combination thereof.

5. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

6. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.

7. The filing of a request by the discharger for modification, revocation and re-issuance, or termination of this Order or a notification of planned changes or anticipated noncompliance does not stay any requirements of this Order.

8. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

9. This Order does not convey any property rights of any sort, or any exclusive privilege.

10. This Order is not transferable to any person except after notice to, and approval by, the Executive Officer. The Regional Board may require modification or revocation and re-issuance of this Order to change the name of the discharger.

11. In the event of any change in control or ownership of land or waste discharge facility presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Board.

12. The Regional Board and other authorized representatives shall be allowed:
    a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the requirements of this Order;

    b. Access to copy any records that are kept under the requirements of this Order;

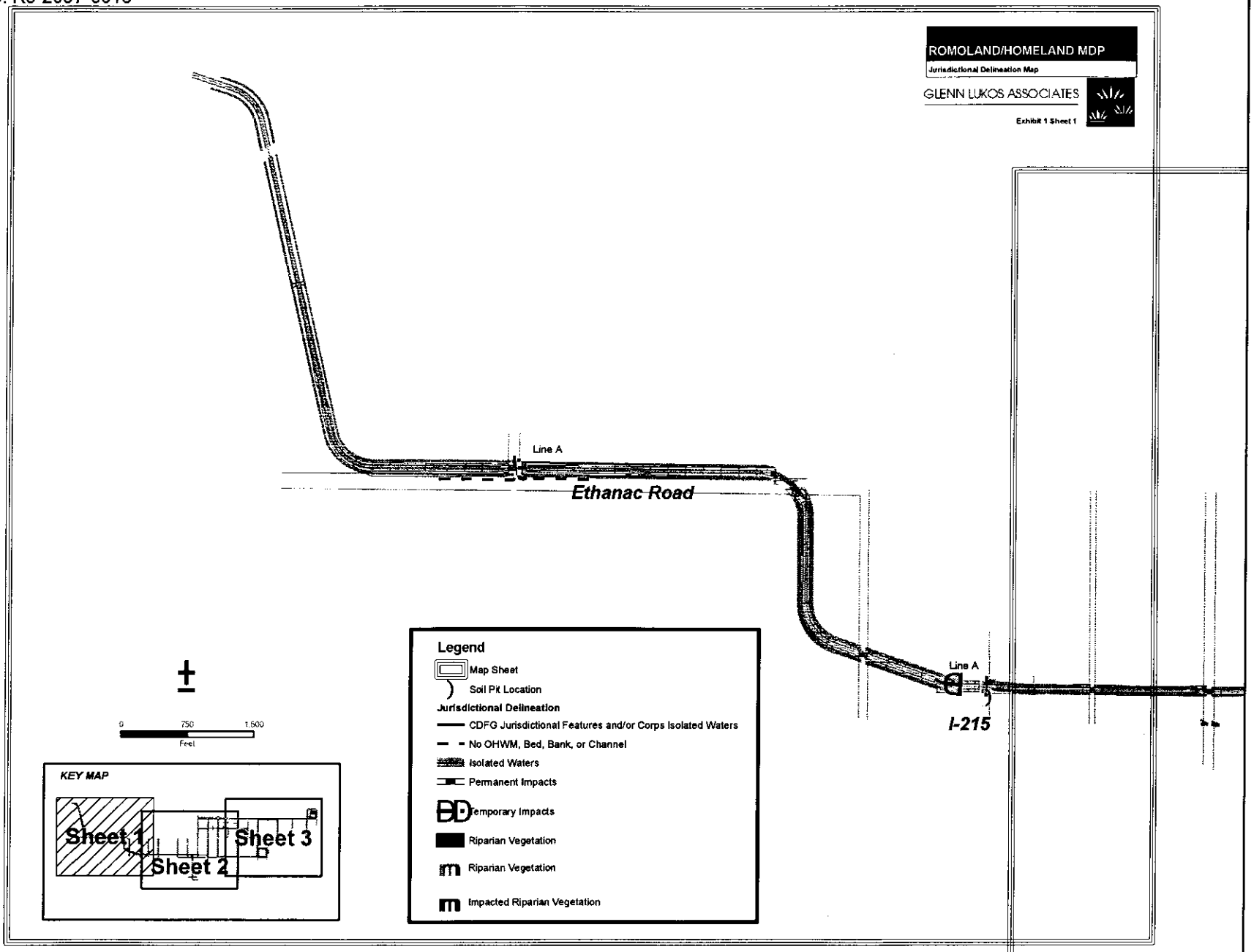
    c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

    d. To photograph, sample and monitor for the purpose of assuring compliance with this Order.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on June 29, 2007.

Gerard J. Thibeault
Executive Officer

Order No. R8-2007-0018



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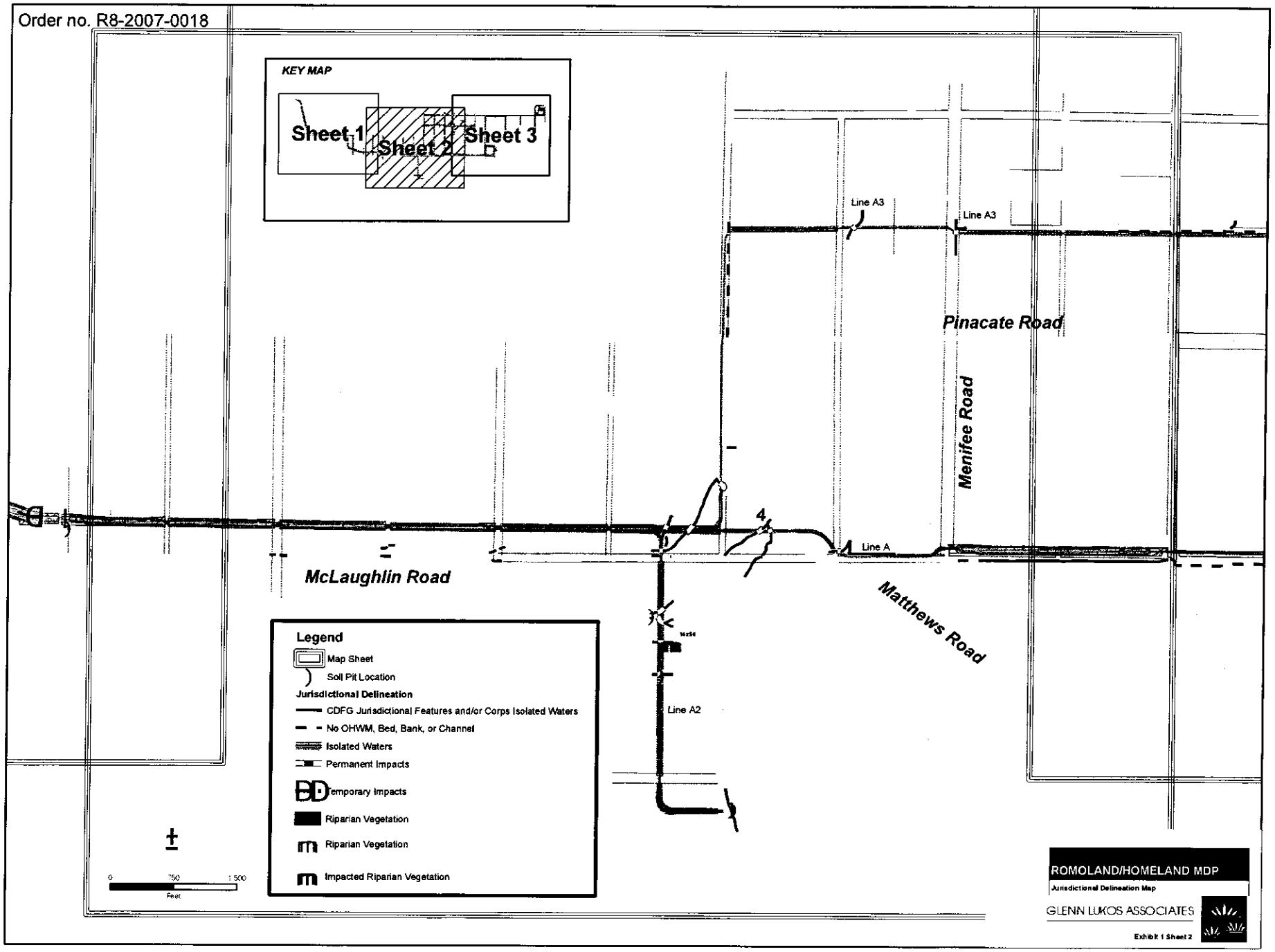
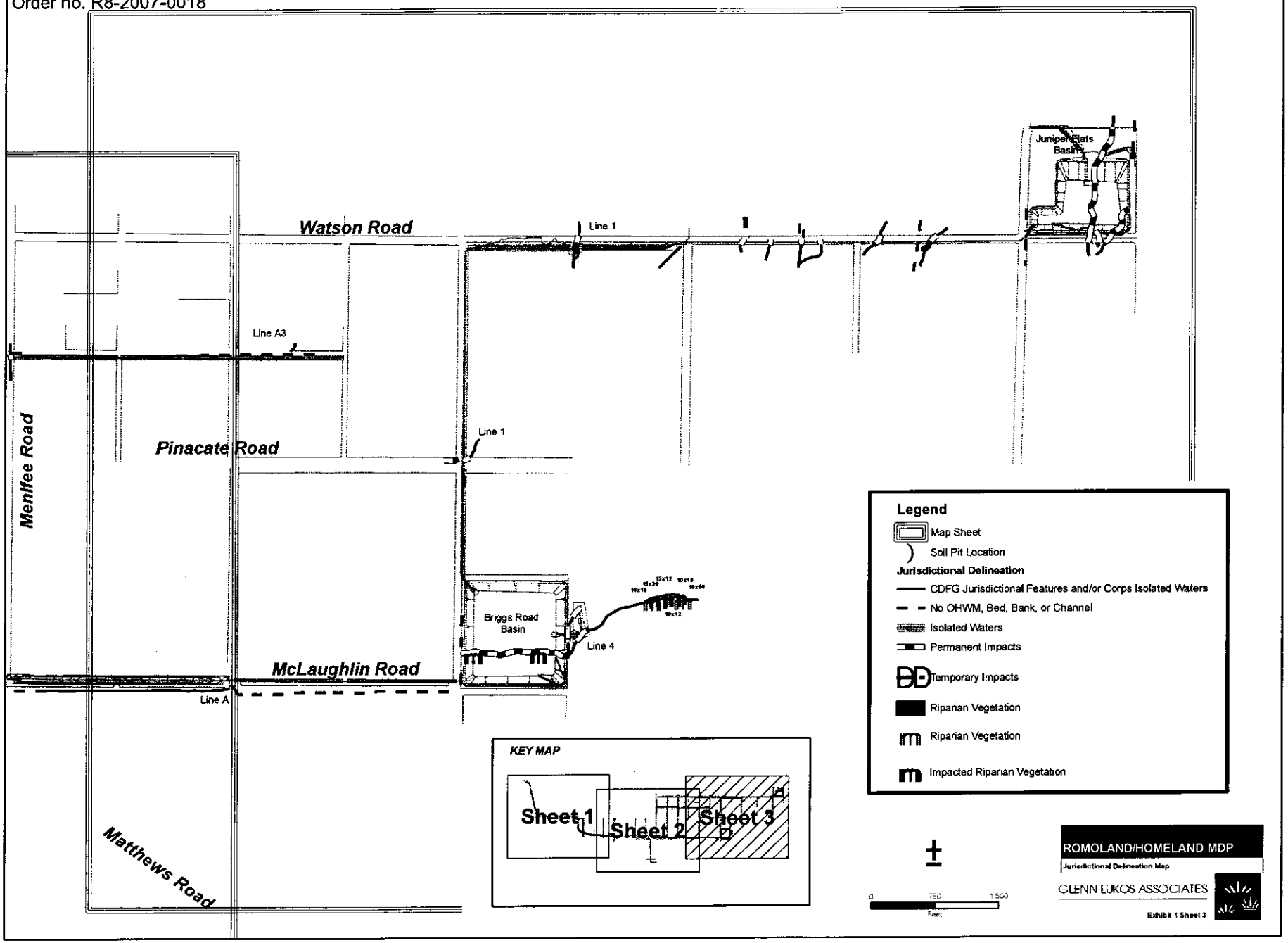
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