DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

June 17, 2011

Regulatory Division SPK-2007-02143

Mr. Shawn Garrity
Western Care Construction
4020 Sierra College Boulevard, Suite 200
Rocklin, California 95677

Dear Mr. Garrity:

We are responding to Colonel Dombi's June 2, 2009, Administrative Appeal Decision concerning our Clean Water Act Determination for the aquatic features on your approximately 20-acre Dias Lane Property near Loomis in Rocklin, Placer County, California. A copy of our June 10, 2011, further evaluation and consideration response document is enclosed.

Based on the available information, including that discussed in the enclosed document, we find our original jurisdictional determination to be in accordance with applicable guidance and regulations. The approximately 4.85 acres of wetlands and ponds on this site are Relatively Permanent Waters which are hydrologically connected through other Relatively Permanent Waters to Traditional Navigable Waters and they have a significant nexus to those waters. As such, these features are regulated under Section 404 of the Clean Water Act. Our June 12, 2008, verification remains valid for five years from the date of that letter unless new information warrants a revision of the determination before the expiration date.

Please refer to identification number 200702143 in any correspondence concerning this project. If you have any questions, please contact Michael Finan at our Regulatory Division, Sacramento District, U.S. Army Corps of Engineers, 650 Capitol Mall, Suite 5-200, Sacramento, California, 95814-4708, email michael.c.finan*@usace.army.mil*, or telephone 916-557-5324. For more information regarding our program, please visit our website at *www.spk.usace.army.mil/regulatory.html*.

Sincerely,

ORIGINAL SIGNED

Nancy A. Haley
Chief, California North Branch

Enclosure

FURTHER EVALUATION AND CONSIDERATION OF INFORMATION PURSUANT TO 2 JUNE 2009 ADMINISTRATIVE APPEAL DECISION, CLEAN WATER ACT, DIAS LANE PROPERTY, WESTERN CARE CONSTRUCTION, PLACER COUNTY, CA, SACRAMENTO DISTRICT, FILE NUMBER 200702143. DATE: 10 JUNE 2011

Action: The District must further evaluate and document its conclusion as to whether waters and wetlands on the Dias Lane Property are hydrologically connected, via Secret Ravine, to the nearest downstream Traditional Navigable Water (TNW) and that these waters are Relatively Permanent Waters (RPW). If the District's conclusion remains that waters on the Dias Lane Property are RPWs and wetlands adjacent to RPWs, those waters are to be evaluated under the significant nexus standard. Any available information that documents the existence of a significant nexus between those RPWs and the nearest TNW must be included in the record in order to insure compliance with the joint Corps/EPA guidance. Once the District has reevaluated its determination that the waters to which the wetlands on the Dias Lane Property are adjacent are RPWs as required above, the District must consider whether, as a result of that reevaluation, there is a need to separately complete a significant nexus determination for the wetlands on the Dias Lane Property.

Additionally, the District must further evaluate whether new information provided by the Appellant, including the topographic map provided at the Appeal Conference and the Preliminary Site Assessment (Wallace, Kuhl and Associates, Inc., 1994), which was submitted with the Request for Appeal would alter its conclusions as to the jurisdictional nature of waters, including wetlands, on the Dias Lane Property.

Sacramento District staff further evaluated the information available, including the appellant's February 18, 2009, Topographic Survey drawing of the site and the appellant's January 1, 1994, Preliminary Site Assessment, to address the issues identified in the June 2, 2009, administrative appeal decision. Michael Finan of the Sacramento District also conducted a subsequent site visit with the appellant and their agents on March 22, 2011, to consider and verify the information in the two new documents identified above and to gain a better understanding of site conditions under normal circumstances. The March 22, 2011, site visit was conducted at a time of year when surface water and flow patterns were more readily observable than during earlier site visits during dry years and/or seasons. As during the prior site visit, stops were made at some of the survey points to verify elevation changes and flow patterns. All connections to and/or pumping from artificial waters sources (e.g., pump house and PCWA water supply) were permanently closed, disconnected and/or off as they have been for some time. All three ponds were full of water and wetlands and areas adjacent and abutting the ponds, including some areas not identified as wetlands on the delineation map, were inundated and/or saturated to the surface. The swale that runs north-northwest on south part of the Dias Lane Property was overflowing and the area around the ditch was saturated and inundated. There was an observable surface water connection between Wetland 2 and the contiguous wetlands, pond and downstream waters on the property just south of the Dias Lane site. The pond and stream immediately south of the site were inundated and flowing with natural precipitation water from surrounding areas including the southern extent of Wetland 2 on the Dias Lane property. Ponds 1 and 2 were directly hydrologically connected to each other via at least one culvert. Water was also flowing

away from Ponds 1 and 2, via mapped wetlands and other inundated areas, to the northwest into a culvert under Highway 80 and surface water was flowing from Wetland 3 to wetlands and RPW's to the southeast.

Subsequently each of the three pathways for water to flow off of the site was followed by vehicle and on foot where property access was granted and remotely where access was limited to verify the route and whether surface water continued to flow from the Dias Lane site ponds and wetlands into downstream tributaries. In particular, the direction of flow in the culvert under Highway 80 was investigated. During the site visit the appellant's agent suggested water in the culvert was flowing toward the Dias Lane site from the west. On further inspection water was observed flowing away from Ponds 1 and 2 through the culvert to the northwest to Strap Ravine. Additionally, water was observed flowing from Wetland 2 through contiguous wetlands across the southern boundary into wetlands and partial impoundments and streams with similarly situated wetlands flowing into Secret Ravine.

Based on further evaluation of the available information, the ponds and wetlands on the site are not isolated. The ponds on the site are themselves RPWs. They and the abutting and adjacent wetlands have an intermittent continuous surface connection with RPW tributaries to TNW's. These features are directly hydrologically interconnected through surrounding wetlands and other surface flows, remnant culverts, near-surface seepage and are all directly hydrologically connected to the Sacramento River, a Section 10 TNW. Water flows from the ponds and wetlands on the site, through culverts, other wetlands, tributary streams, and partial impoundments (residential/small farm ponds) into named RPW streams. Water flows to downstream TNWs through a series of RPW Creeks and streams, including Secret Ravine (approximately 750 feet southeast of the subject property per appellant's document), Strap Ravine, Miners Ravine, Dry Creek and the Natomas East Main Drainage Canal (AKA Steelhead Creek). Steelhead Creek is also regularly directly connected to the American River, a Section 10 TNW, near its confluence with the Sacramento at Discovery Park during high flows in the American River. Although no formal determinations have been made as to whether Steelhead Creek, Dry Creek or Secret Ravines are potential TNWs, all three have stretches which are navigable in fact and may have been historically been used, are currently used, or be susceptible to future use in commercial navigation. These streams and creeks, including Strap Ravine, all have direct surface hydrological connections to TNWs.

Under normal circumstances the ponds and wetlands on the subject site fill in response to precipitation and runoff from abutting wetlands and upland areas on the subject site, and from surrounding lands within the immediate drainage area. Wetlands 1 and 2 abut and generally drain into Ponds 1 and 2, respectively. However, due in part to the flatness of the part of the site where the wetlands and pond occur, as water levels in the ponds reach their highest point, surface water moves between both of these ponds and their abutting wetlands. When the area is saturated, surface water flows away from Pond 2 and Pond 1and their riparian fringes and associated wetlands to the northwest and west to a low spot on the western boundary of the site, "343.63 G Near Culvert" as noted on the Topographic Survey drawing. Water flows through a culvert at that location under Interstate 80 into the storm drain system for a newer subdivision northwest of the subject site and then into Strap Ravine and abutting wetlands below the subdivision. Water also flows from Pond 2 into, and out of, Wetland 2 to the south. When the

ponds fill and Wetland 2 is saturated to the surface and/or seasonally inundated in normal precipitation years, water flows from it across the southern boundary of the subject site through contiguous wetlands on the property immediately to the south and into and through wetlands, impoundments (manmade ponds) and a stream/wetland complex system directly into Secret Ravine. Although there are small apparently man-made swales on the Dias Lane site in the locations shown on the Topographic Survey, they are very shallow and become completely saturated and/or inundated during and for some time after precipitation events during the wet season in normal years. At such times surface water is not confined to the swales and migrates in other directions, following the more general land surface contours of the site towards lower elevations at the margins of the site as shown on the appellant's Topographic Survey. Those flow patterns and general site condition observations were noted on a copy of the Topographic Survey during the most recent site visit. Photographs of representative locations and conditions were taken during the March 22, 2011, site visit.

Wetland 3 is located below the high water level of Pond 3 which is maintained by the berm on the southern and eastern pond boundary. Observed inundation in Wetland 3 immediately below the earthen berm in a location where the swale does not appear to receive overland surface drainage from the north, indicates seepage from Pond 3 to the southeast through or below the earthen berm does occur when the pond is full and water pressure on the pond bottom, earthen berms and underlying swale is greatest. There is no evidence a pond liner or other impervious material (e.g., concrete) was used to construct Pond 3 or its berms in the pre-existing swale. In addition, the location of the Pond 3 berm and ridge line shown on the Topographic Survey drawing apparently act to intercept immediate surface drainage from the north and move it into Pond 3, and decrease the surface drainage area contributing to the wetlands below the pond to the south and southeast. The wetlands below the ridge and pond impoundment are likely sustained at least in part by shallow subsurface water since there is otherwise very little surface drainage for these wetlands along the southern boundary of the site and they remain saturated and/or inundated for some time after precipitation events. Wetland 3 also slopes downward towards the southeast where water from the wetland flows off of the site, so it is unlikely observed surface water in the wetland is solely due to rain falling into it from directly above. Although there is no record they have been used at this site, dye or other tracer tests could be performed to more positively document hydrologic connectivity between Pond 3 and the wetlands below it.

Based on available information the ponds and wetlands on the site and the water flowing away from them would not be characterized as "ephemeral" but more accurately as "intermittent" in accordance with the accepted definitions of these terms in the Corps' nationwide permits.

When saturated and/or inundated, surface and near-surface water flows generally from slightly higher elevations to lower ones as shown on the appellant's Topographic Survey drawing. However, the changes in elevation are so slight and the area around the ponds, which includes the wetlands, is very flat and closely underlain by an impervious layer, as documented in the appellant's delineation report test soil pit data and other sources. Consequently, surface and near surface water also flows laterally out of the ponds and abutting and adjacent wetlands off of the site in three directions. In some cases small ditches and swales appear to catch initial surface flows and direct them towards the ponds as shown on the topographic survey. However, when

the wetlands become seasonally saturated and inundated surface and near-surface water flows towards the three lowest points on the site and off into downstream wetlands and RPW's. The appellant's Topographic Survey also clearly shows these corresponding changes in surface elevations which reflect the three primary pathways for water to leave the site and flow into RPWs and downstream into TNWs. These drainages are reflected on general topographic mapping and were confirmed during site visits.

Although the exact flow regime in each of the pathways is not precisely measured since there are no known gages immediately near the subject site, there are indicators off site flows occur regularly during the wet season in normal years and flowing water was directly observed during the most recent March 22, 2011, site visit. Downstream gages in the larger RPWs would provide more precise flow measurements for those streams. However they also would include contributing flows from other smaller tributary streams and similarly situated wetlands. Water seasonally flows off the site through a wetland swale complex with small partial impoundments, approximately 800 feet to Secret Ravine to the southeast, approximately 2700 feet to Secret Ravine to the south and to Strap Ravine which is approximately 1700 feet northwest from the site boundary. Water flowing to the northwest from the site mixes with storm water and other runoff from a medium density residential subdivision and light industrial development and flows into a stream and wetlands abutting Strap Ravine and into Strap Ravine itself. Water in Strap Ravine then flows approximately 15000 feet into Secret Ravine above its confluence with Miners Ravine. Water then flows in Secret Ravine approximately 2.5 miles into Miners Ravine which then flows approximately 5 miles to Dry Creek which flows 12.5 miles to Steelhead Creek which then flows approximately 6.5 miles to the Sacramento River. A portion of the water flowing seasonally off of the site to the southeast flows through wetlands, swales and a small partial impoundment through and next to rural residential development into Secret Ravine which then follows the same path described above. Some of the water flowing off the southeast corner of the subject site also flows into an underground storm drain directly into Secret Ravine just above the point where surface flows from the site enter Secret Ravine. Water flows southward from the site through wetland complexes, surface channels and ponds and other impoundments in rural residential development into Secret Ravine.

Based on available information, the ponds were excavated approximately 30 years ago and have been generally abandoned. All pumps and pipes which may have been used to augment seasonal filling and distribute irrigation water have been disconnected and are not functional. Prior to their construction, 1971 and 1962 aerial imagery shows wet spots in the areas where the ponds are now and wet drainage swales leaving the site in the directions water currently flows from the features on this site into downstream RPWs and to navigable waters. In their current condition Ponds 1 and 2 are RPWs and support a fairly dense forested fringe of hydrophytic trees (e.g., willows, cottonwoods and Valley Oaks) and obligate and other wetland vegetation. Abutting wetlands 1 and 2 also support mature riparian trees and obligate and other hydrophytic plants adapted to inundated and saturated conditions. Based on all available evidence, including available aerial imagery, reports and site visits, all of the ponds hold water seasonally for substantially more than three continuous months during the wet season in normal precipitation years and as such are themselves considered RPW's. The perimeter of Pond 3 is less densely vegetated than Ponds 1 and 2, but Pond 3 and adjacent wetlands support several hydrophytic trees and other wetland vegetation. Pond 3 appears to be shallower and remain inundated for

less time than the other two ponds. However, Pond 3 holds water for at least three months under normal circumstances in most years and would also be considered an RPW. Pond 3 also has a slightly higher berm relative to the wetlands adjacent to it, creating more of an impoundment at its lower end keeping overland surface water from flowing into Wetland 3 under most circumstances.

In March 2011, Ponds 1 and 2 and all three wetland areas were inundated and water was flowing from them off of the site through culverts and similarly situated waters and wetlands into downstream wetlands and RPW tributaries. Saturation in the lower parts of Wetland 3 appears to be partly from surface flows north of Pond 3, but may also be from seepage underneath the pond berm. The soil at the bottom of the pond berm at the upper end of Wetland 3 was saturated and there were several inundated places in Wetland 3 immediately below the berm around Pond 3 above where surface water may enter from the north which is explained by seepage through or under a somewhat pervious earthen berm and/or from more porous soil layers beneath the berm in the pre-existing wetland swale. This is supported by the lack of a watershed for most of Wetland 3 due to the barrier to surface flow created by the Pond 3 berm and observation of surface water in the wetland in a location above where flow from the northeastern side of the site enters the wetland. Based on the appellant's site assessment, data sheets and other available information, the site is underlain by impervious bedrock and/or hardpan material with areas of decomposed granite and other soils above those so near-surface lateral movement of water may occur and contribute to seasonal draw down of water levels in the ponds and abutting wetlands seasonally prior to the part of the season when evaporation and transpiration (e.g., April, May and later in the Spring and Summer) are more of an influence on surface water. The latter occurs after the trees, shrubs and other vegetation leaf out and daytime temperatures increase. A hole in an abandoned concrete structure below Pond 3 at the upper extent of Wetland 3 had near-surface water in it and there was water seeping out from below the lower corner of a small concrete slab below Pond 3 during the March 22, 2011, site visit. Water from Wetland 3 was observed to flow to the southeast through the culvert shown on the delineation map and into both a small surface stream and a local storm drain to Secret Ravine.

In further review of aerial imagery, available documents related to this and other downstream delineations and jurisdictional determinations and direct observations, Ponds 1 and 2 are RPWs and the streams (named above) through which water flows from these ponds and wetlands to downstream TNW's are also RPW's. Ponds 1 and 2 only dry out at the end of the dry season in dry years or drought periods, but otherwise remain inundated and/or saturated near the surface for most or all of the year in normal years. Although Pond 3 is shallower and appears to dry out somewhat earlier than Ponds 1 and 2, it also is a RPW.

Based on available information there is a significant nexus between the wetlands and other waters on the Dias Lane site and downstream TNWs. All three ponds and abutting and adjacent wetlands on the site flow into the same system of wetlands and tributaries, including Strap and Secret Ravines and from there downstream into the Sacramento and American Rivers. The wetlands and other aquatic features on the site, in combination with similarly situated wetlands on adjacent sites, have more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of downstream TNWs. These ponds and wetlands are functioning like

catch basins and retaining water and in their current vegetated condition are reducing pollutants in storm water leaving the site through infiltration, biological uptake and settling.

The subject ponds and wetlands, in combination with similarly situated wetlands, are affecting the duration, frequency, and volume of flow in the downstream tributaries which in turn affect the duration, frequency, and volume of flows in downstream navigable waters. The ponds and wetlands along with similarly situated wetland are intercepting and holding floodwaters and sheet flow from uplands, and then releasing some of the water to these tributaries in a more even and constant manner. Although no precise measurements have been made, based on size and depths, the ponds themselves have a capacity of approximately 10 acre-feet and the abutting wetlands another 3 acre-feet at a point in time. Over the wet season those numbers would be higher as the ponds and wetlands fill, spill and slowly dry out. The site is located on the relatively flat top of a relatively small flat ridge and based on available topography the drainage area for the wetlands and other waters on the subject site is approximately 22 acres. With an average rainfall of approximately 23 inches, mostly falling in January when evapotranspiration is low, the annual cumulative total precipitation falling into the drainage area is around 46 acre feet. The wetlands and other aquatic features on the site have the capacity to hold a substantial (1/4 at a single point in time and more over the wet season) portion of the water coming into the drainage area before it leaves the site into tributary streams.

The wetlands and ponds are also trapping and holding pollutants that may otherwise reach tributaries (and downstream navigable waters) including sediments, chemicals, and other pollutants. The site was used for orchards and a sod farm and is currently used for horse pasture. There is evidence the aquatic features on this site (i.e., Ponds 1, 2 and 3 and Wetlands 1, 2 and 3) are receiving horse and other animal excrement, sediment and substances, including remnant or excess fertilizers from abandoned construction, sod farm and other debris, asphalt, metal barrels, electrical and other decomposing material and equipment. They also intercept runoff which carries similar pollutants, sediment and organic matter from active adjoining residential and ranchette-type small farms with outbuildings and animal pens and from active adjacent light commercial development and uses. There is also evidence of current herbicide used in and along the perimeter of adjoining upslope development and along road edges where it can flow into the wetlands and ponds on the site during precipitation events. The appellant's site assessment identifies other potential, but unlikely pollutants from abandoned electrical equipment.

Additionally these ponds and adjacent wetlands provide habitat (i.e., feeding, nesting, spawning, and rearing young) for aquatic species that move into and live in, or provide food for other aquatic life, in downstream TNWs. Aquatic insects and macro-invertebrates and a small frog were observed in the wetlands and other waters on and immediately off the site as were nesting and foraging geese. The dense riparian trees and shrubs which overhang Ponds 1 and 2 and abutting and adjacent wetlands are dropping substantial amounts of leaf litter and woody debris which is decomposing and contributing carbon and other nutrients for aquatic animals and plants which support the food web in these RPW's, tributary RPW's and downstream TNW's. The stems, leaves and roots of the aquatic vegetation, including trees, shrubs and forms, are trapping sediment as noted by sediment staining on exposed parts. These actively growing wetland plants are absorbing nutrients and pollutants which would otherwise flow directly to downstream waters. The trees and other riparian vegetation in and around these ponds and wetlands help

shade the water and keep water temperatures lower and dissolved oxygen levels higher in water both on and off of the site. Their stems, roots and woody debris also provide breeding and foraging habitat and nutrients for aquatic invertebrates which support healthy downstream fish populations.

These ponds and wetlands, along with similarly situated wetlands, have more than a speculative or insubstantial effect on Secret Ravine and downstream TNWs. Based on a brief review of available literature, this portion of Secret Ravine and the tributary streams below it, directly support at least two commercially important anadromous fish species as well as other animals and plants in downstream tributaries. Secret Ravine which is approximately 800 feet from the site, and to which all of the water leaving the wetlands and ponds on this site flows, is spawning and rearing habitat for a population of fall-run Chinook salmon as well as California Central Valley steelhead trout. Central Valley fall/late fall-run Chinook salmon is a federal Species of Concern and a California Department of Fish and Game Species of Special Concern. Central Valley steelhead trout is a federally-listed threatened species. Secret Ravine is designated critical habitat for the Central Valley steelhead and provides most of the suitable spawning habitat in the entire Dry Creek watershed. Juvenile steelhead remain for a year in these fresh water areas before beginning to emigrate to the ocean and are extremely sensitive to environmental perturbation so wetlands and other waters in these locations are important to their survival and overall sustainability.

Although the relative size of the ponds and wetlands on the site is small compared to overall size of the watershed they have a measureable contribution to overall water quality, sedimentation and biological integrity and productivity in the TNW's to which they are connected.

In summary, based on further evaluation and review of all available information, including the documents and new information provided by the appellant, the wetlands and other waters on the site are directly hydrologically connected to RPW tributaries and have a significant nexus to downstream TNWs.