Responses to Administrative Appeal Decision

Clean Water Act

1. Patey Property

Wasatch County, Utah

Sacramento District

June 16, 2014

Background Information: The Patey Property (site) is an approximately 61.46-acre parcel of land, located along Snake Creek, on Pine Creek Road, in Wasatch County, Utah, 2 at Latitude 40.53 North, Longitude -111.49 West, within Section 27, Township 3 South, Range 4 East, Salt Lake Meridian. On March 27, 2012, the Appellant's attorney submitted a request for a jurisdictional determination for the Property. The District's review included a field visit on May 15, 2012. On July 19, 2012, the District issued its CWA jurisdictional determination for the Property (199950107). The District concluded that the site contained 30.97 acres of waters of the United States, including wetlands, within CWA jurisdiction. The Appellant submitted a Request for Appeal (RFA) on September 14, 2012. The Appellant disagreed with the District's determination that the waters on the Property are jurisdictional and appealed that determination, citing the reasons for appeal addressed below.

General information: In the South Pacific Division (SPD) 17 May 2013 administrative appeal decision, Sacramento District (SPK) was directed to further evaluate and consider its decision in several specific areas. In accordance with SPD instructions and to more fully understand and document the topography, hydrology, hydrologic

connectivity, and current and historical conditions on the property, SPK staff reviewed the information in the administrative record, additional publicly available information, and conducted another site visit on June 25, 2013. Based on the available information, SPK responses to both of the appeal reasons which had merit are provided below.

Action Needed for Reason 1: In its final decision, the District must document its evaluation of the effect of the dams, bypass structures, head gates, and other structures that direct and control the flow of water between the ponds and wetlands on the Property and Snake Creek. In documenting the effects of these structures, the District must support its conclusions as to whether these structures effectively keep Snake Creek separate from the ponds and wetlands on the Property, as asserted by the Appellant, and thus preclude the conclusion that there is a continuous surface connection between Snake Creek and the ponds and wetlands on the Property, or whether a continuous surface connection remains in spite of these structures.

SPK Response for Reason 1: Based on available information the dams, bypass structures, head gates and other water control structures do not keep from the ponds and wetlands on the site separate from Snake Creek. The ponds on the site are relatively shallow, leaky impoundments, generally surrounded on their down slope sides with low, irregular earthen berms made out of material apparently excavated out of the wetlands in and around the impounded areas. The mapped wetlands and ponds are located in a general depressional area in and along the historic active channel of Snake Creek and the discharge zone for hot springs which flow into it. Water flows over,

around and through the constructed structures even when they are closed primarily with stop logs to try to shut off or control flows. These structures do have a partial and temporary effect on the relative amounts of water which flows from the springs, Snake Creek and adjacent wetlands and uplands into and out of the ponds, ditches and wetlands mapped on the site into downstream waters. However, the mostly perennial flow of water from the springs and stream and a seasonally high water table from snowmelt and surface runoff, coupled with site geomorphology and landscape positions of the ponds and wetlands, preclude the existing berms, gates or bypass channels from completely severing the surface and near surface hydrologic connectivity of the ponds or wetlands from each other or to downstream Traditional Navigable Waters. As observed during the June 25, 2013, site visit, most of these structures are porous earthen, leaky or easily overtopped as water levels rise.

It is obvious that perennial stream and spring flows are the primary sources of surface water filling and supporting the wetlands and ponds on the site. Although actual flow rates are not precisely known, water was observed flowing freely out of the springs into the impounded ponds and wetlands which then drained into downstream waters, including Snake Creek. Constant stream flows were similarly observed from Snake Creek and adjacent wetlands and back into Snake Creek. Potential rates may be 2-3 cubic feet per second or greater depending on the time of year and relative precipitation. Even if the leaking control structures and berms were to be made more impervious, the spring and stream water would accumulate fairly quickly leading to elevated water levels which would overtop existing banks and edges of the ponds, allowing water to continue to flow from these features into down slope wetlands and

streams, including Snake Creek and downstream Traditional Navigable Waters. Constructing a dam or water control structure sufficient to effectively isolate the spring and stream fed wetlands and impounded ponds would likely require fairly major engineering and construction efforts, including substantial excavation to install subsurface barriers to block lateral subsurface flows. Such efforts would likely require a permit under Section 404 of the Clean Water Act since it would involve discharges of dredged or fill material into features which are not even potentially isolated and have a significant nexus to downstream TNW's.

Additionally, based on soil types and , and observations of drainage and vegetation patterns in and around the ponds, there appears to be substantial lateral subsurface seepage. The majority of the soils on the site are *Kovich Loam* and *Kovich Loam, Channeled*. Both have a layer of loam approximately 2-3 feet above a sandy cobble layer which allows water to flow laterally. The Natural Resources Conservation Service has described the soils in the mapped wetlands and pond areas as being generally saturated with a permanently high water table within 1-2 feet of the surface. The presence of a relatively high water table at the time of the site visit was supported by the presence of saturated soil and actively-growing hydrophytic vegetation outside of the impounded areas The unlined, earthen channel constructed to route some Snake Creek water around the western perimeter of the ponds and wetlands is eroding and pervious. A number of areas had seepage from impoundments on the sides of the channel above the existing open water level.

These structures and channelized streams do effectively move some water around the site, allowing colder water from the creek to mix with hotter mineral spring water in the

ponds. Based on the general layout, construction and operation of the existing structures, they are primarily to allow for adjustments in relative water levels and temperature in the impoundments. Based on available information the impoundments are used, among other things, for recreational fishing and or bathing. However the structures do not effectively separate or permanently keep all water out of the wetlands or ponds on the site, nor do they prevent water from the ponds and wetlands from flowing downstream into Snake Creek and downstream Deer Creek and Utah Lakes, both navigable in fact. Flowing water leaving the wetlands and impoundments contained sediment and minerals. Water flowing from the springs, wetlands and ponded areas mapped within the surveyed area was observed and photographed during the June 25 2013 site visit. Additionally, most available aerial imagery clearly shows these interconnections and water flowing from the wetlands and other aquatic resources on the site into Snake Creek and downstream TNW's. The wetlands on the site abut Snake Creek and the berms between the ponds and the creek are generally less than 10 feet wide and narrower in many spots. This proximity is sufficient for substantial ecological interactions to occur between the wetlands and the creek. These and other chemical physical and/or biological interactions are not severed by the gates and other water diversion feature constructed in wetlands and streams on the site. The wetlands and impounded aquatic features on the site are clearly not isolated geographically or hydrologically from the relatively permanent Snake Creek.

Action needed for Reason 2: The District must evaluate and document its evaluation and conclusions as to whether the ponds on the Property were created by excavating and/or diking dry land and, therefore, fall into the category of waters generally

considered not to be waters of the United States as described in the preamble of the 1986 regulations. The District must also document its consideration of whether the ponds on the Property were excavated in existing wetlands or other waters. Should the District conclude that the ponds were excavated in uplands, it must evaluate and document the evaluation of whether the ponds on the Property have been abandoned, or there is, otherwise, reason for a case-specific finding of jurisdiction as described in the 1986 preamble.

SPK Response for Reason 2: The conclusion the ponds on the site were not excavated in uplands is supported by various different lines of evidence. In their current condition, as described in part above they are directly connected to and in line with Snake Creek and discharges from mineral hot springs which flow through the ponded areas. In addition the ponds are within and mostly surrounded by wetlands which have been on the site and continue to exist outside of current low earthen berms constructed around the perimeter of the ponded areas. From site topography it is obvious the ponds were constructed by excavating and dredging out portions of the preexisting wetlands and placing the dredged material along the perimeter of the excavation area to limit water flow to the south and west. Based on available information, the wetlands and ponds continue to be sustained by water flowing out of the springs and the creek, augmented by seasonal snow melt. The entire area delineated as wetlands and ponds has a relatively high ground water table and there is no apparent source of irrigation or other water entering the ponds. The ponds were excavated in areas mapped by the U.S. Natural Resource Conservation Service as hydric soils, and the surrounding land

continues to exhibit the characteristics of hydric soils that were formed under prolonged inundated or saturated conditions. Current and historical U.S. Geological Survey topographic mapping shows the ponds as being impoundments directly on line in Snake Creek with a clearly distinct area of wetlands surrounding them. The extent of wetlands actually mapped on the site and the location of the creek are substantially the same as shown on those maps, with the small exceptions of older and more recent fills and excavated features, including those discussed above. Topographic mapping dating from 1962 to 1979 shows the creek and surrounding wetlands in approximately the same location and surrounding wetland area as they currently exist. A subsequent 2001 topographic map of the site shows two ponds, a larger one directly in the middle of the stream channel and a smaller one in approximately the same location as the upper pond also in the middle of the stream and in the wetlands in approximately the same locations as they are now. This mapping show that the ponds were constructed as impoundments of the stream and in wetlands, but that the ponds or impoundments were not there in 1979 or earlier. Assuming the USGS topographic mapping of streams and larger aquatic features in this area was generally accurate, as it appears to be when compared to other data and current site conditions, the ponds were constructed subsequent to 1979 in wet areas and on the stream. Based on available aerial imagery and existing site conditions, the smaller pond or impoundment was enlarged subsequent to the 2001 mapping in the same landscape position and on stream as it currently exists. Based on soils, landscape position, composition of the berms, and general topography of the site, both impoundments were constructed using the same general technique of dredging and lowering the bottom elevation of the wetland area

along the stream, side casting and using the dredged material to create berms in their current locations in wetlands along the perimeter of the ponds.

Based on a preponderance of available information, including documentation of prior streams and wetlands where the current impoundments are, the ponds on the site were not constructed by excavating and/or diking dry land and, therefore, do not fall into the category of waters generally considered not to be waters of the United States as described in the preamble of the 1986 regulations.