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**COUNTY OF INYO
WATER DEPARTMENT**

July 28, 2016

California Water Commission
P.O. Box 942836
Sacramento, California 94236

Subject: County of Inyo's request to modify the boundaries to the Owens Valley
Groundwater Basin

Dear Commissioners:

The County of Inyo (Inyo) requested a modification to the boundaries of the Owens Valley Groundwater Basin (6-12) pursuant to Section 10722.2 of the Sustainable Groundwater Management Act (SGMA). The Department of Water Resources' (DWR) draft recommendation concerning Inyo's request is "*denied, as modified.*" At your July 21, 2016 meeting, you received public comment from representatives of Inyo and the Tri-Valley Groundwater Management District (TVGMD) requesting that your commission not adopt the draft recommendation. During that testimony, the Inyo representative indicated that the Inyo County Water Department (ICWD) would furnish further correspondence to your commission laying out Inyo's technical and jurisdictional rationale for the requested change (see Inyo's July 19, 2016 letter to the CWC, provided at the July 21 meeting). This further correspondence lays out Inyo's technical and jurisdictional reasoning behind the request, and details Inyo's compliance with the emergency regulations adopted by your commission to govern basin boundary modifications.

As mapped in DWR's Bulletin 118, the Owens Valley groundwater basin extends north and east of Bishop to the California/Nevada state line (see attached map). Existing hydrogeologic data indicate that a partial groundwater flow barrier exists between the Owens Valley and the Tri-Valley area. Two primary dynamics motivated Inyo County, Mono County, and TVGMD to work cooperatively to request a basin boundary revision of the Owens Valley which would separate the Tri Valley subbasin (TVSB) from the Owens Valley subbasin (OVSB).

The first dynamic was to more clearly present the complex hydrogeologic relationship between the TVSB, OVSB and Fish Slough. North of Bishop, in an area known as the Volcanic Tablelands, is Fish Slough valley composed primarily of Pleistocene-aged volcanic rocks with a thin layer of alluvial sediment. Groundwater is discharged into this valley by several springs and seeps, forming a unique ecosystem that provides critical habitat for several rare plants and the Federally Endangered Owens pupfish. Fish Slough is, therefore, recognized as an Area of Critical Environmental Concern (ACEC) and protecting this wetland ecosystem is a priority.

The second motivating dynamic for Inyo's request for the basin subdivision was to streamline the SGMA process for both subbasins, allowing efficient creation of GSAs and GSPs, and reducing the additional jurisdictional hurdles which will delay and paralyze sustainable groundwater management policies from being implemented. Although there are excellent jurisdictional merits to our basin boundary modification request, we considered it more important to use this modification process to clarify the hydrology of the two subbasins and to maintain the overall hydrogeologic basis of Bulletin 118 (if the data supported such). Therefore, we chose to pursue a scientifically based modification request.

Technical Considerations

Inyo's request was for a scientifically-based internal boundary modification due to the presence of a partial barrier to groundwater flow between Tri Valleys (Benton, Hammil and Chalfant valleys) and the Owens Valley that results in substantial groundwater discharge to springs and wetlands at Fish Slough with relatively little groundwater flow from the Tri Valleys region into Owens Valley.

Impediments to groundwater flow. The proposed boundary between the proposed Tri Valley Subbasin (TVSB) and the proposed Owens Valley Subbasin (OVSB) also aligns with the Inyo/Mono county line due to the location of the subsurface bedrock groundwater barrier which diverts flows. Dividing the basin along this jurisdictional line facilitates formation of Groundwater Sustainability Agencies (GSAs). This boundary modification would support sustainable management of the subbasins by compartmentalizing the basin into the natural water budget units that hydrogeologists have customarily used when working in the Owens Valley and Tri Valley areas. Alignment of subbasin boundaries with customary hydrologic practice will facilitate preparation of groundwater budgets and groundwater sustainability plans (GSPs).

Inyo completed the CCR Title 23, Division 2, Chapter 1.5, Subchapter 1, requirements basin boundary modification request was deemed "Completed" by DWR as of 3/30/2016. Significant ICWD staff time was spent collecting, citing and summarizing the extensive body of scientific evidence, principally developed by the United States Geological Survey (USGS) which provides scientific support for our joint boundary modification request, into a more concise Hydrogeologic Conceptual Model for the Owens Valley and Technical Justification Report.

This material is summarized here and available for review in its entirety on DWR's Basin Boundary Modification Request Management System (BBMRS).

However, in July 2016, DWR staff made a draft recommendation to deny Inyo's request to create the TVSB and OVSF, instead choosing to create the Fish Slough subbasin. The cursory explanation for this recommendation given on DWR's web page (as of July 28, 2016) is based on 345.2(c) of the emergency regulations:

The request did not provide adequate scientific information to support basin subdivision at the Mono / Inyo County line. The observed gravity anomaly and associated geologic structure does not demonstrate a hydrogeologic barrier to groundwater flow. In addition, administrative edits were made to include a previously identified B-118 basin, "Fish Slough", as a subbasin to Owens Valley.

The relevant requirement concerning groundwater flow barriers is (344.14(b)) is that the information submitted by the requestor "*shall demonstrate the presence or absence of impediments to subsurface groundwater flow, such as impermeable material, a fault, or groundwater divide....*"

Inyo's request is based on the presence of both a fault system and impermeable material. The TVSB slopes topographically downward from north to south with a mild topographic high separating Chalfant Valley from the Laws area. Recharge for the TVSB primarily comes from melting snow from the White Mountains to the east percolating into alluvial sediments. As this groundwater flows southward through Hammil Valley it hits two impediments to groundwater flow: a fault system and a bedrock block that deflect significant flow to the southwest into Fish Slough.

Geologists and hydrologists from the USGS, the BLM, University of California researchers, CDFW, ICWD, and private consultants recognize that a substantial portion of the groundwater flow to Fish Slough originates from outside its watershed. Due to the presence of the north/south oriented Fish Slough fault and its extensive system of associated faulting combined with a subsurface bedrock high (indicated by gravity surveys) located to the east of Fish Slough, groundwater from the TVSB, especially the Benton and Hammil Valleys has a subsurface conduit to discharge to the southwest into Fish Slough. The Fish Slough fault system also connects Fish Slough to the northern OVSF in the area known as Five Bridges (north of Bishop, west of Laws). The evidence for these groundwater flow relationships is not only geophysical (a gravity anomaly that is indicative of a bedrock barrier in the alluvial basin fill), geological (the Fish Slough fault system that diverts groundwater from the Hammil Valley area into springs and wetlands at Fish Slough) but also hydrological (groundwater discharge at Fish Slough and regional groundwater modeling indicating a relatively small amount of groundwater flow from the TVSB into the OVSF). This evidence is derived primarily from existing studies, principally conducted by the USGS. In addition, empirical evidence gathered from decades of groundwater

and surface water monitoring in the vicinity corroborates this partial groundwater flow barrier. Water budgets and groundwater modeling efforts, the two primary tools for evaluating whether a basin is managed sustainably, have customarily separated the TVSB from the OVSB, because in the judgement of hydrogeologists working in the basin the two subbasins are logically and conveniently treated separately. The evidence for a substantial groundwater flow barrier was given in ICWD's Technical Report: "Technical Justification of Proposed Boundary Modification to Owens Valley Groundwater Basin (6-12), Inyo and Mono Counties," which is uploaded to the BBMRS.

Concerning the gravity anomaly that DWR deemed to be inadequate evidence, USGS researchers concluded the following:

1. *"A dominant gravity high interrupts the Owens Valley gravity low northeast of Bishop. This gravity high must be the expression of a mass of dense rock within or surrounded by the Cenozoic section"* (Pakiser et al., 1964, page 27);
2. *"The northern extension of the valley graben under Chalfant, Hammil, and Benton Valleys is partly isolated from the deepest part of the Bishop Basin by a bedrock slump block. A high, isolated gravity anomaly ... defines the extent of the buried slump block of bedrock that partially obstructs the south end of the Chalfant Valley. ... The protrusion of the slump block, conjunctive with the overlying fan, probably deflects deep groundwater – flowing south along Chalfant, Hammil, and Benton Valleys to the Bishop Basin – farther west beneath the southeastern part of the Volcanic Tableland near Fish Slough"* (Hollett et al., 1991, page B25).

USGS and BLM researchers concluded that faulting also has a role in deflecting groundwater flow from Hammil Valley to Fish Slough:

1. *"The structural capture of the surface stream by the Fish Slough fault zone may also impact subsurface flow of groundwater flow from Hammil Valley Discharge through Fish Slough from basins to the north and northeast was also inferred by Hollett and others (1981 [sic]). As noted in the 1984 BLM Planning document the inferred aquifer boundary may include a different and larger area than the watershed boundary delineated at the surface."* (Jayko and Fatooh, 2010, page 3).
2. *"The Fish Slough fault zone crosses out of the Volcanic Tablelands and into the divide between Chalfant Valley and Hammil Valley to the north. The fault captures the Hammil Valley axial wash and likely also captures subsurface flow from the north."* (Jayko and Fatooh, 2010, page 10);

The citations given above, all of which were uploaded to the BBMRS as support for Inyo's request, indicate the presence of an impediment to groundwater flow that deflects groundwater from the Tri Valley area to Fish Slough. If one examines the USGS gravity anomaly map from

USGS Professional Paper 438, Plate 1a (Sheet 2 of 3) or Figure 3 of ICWD's Technical Report which uses additional, more current gravity data, one can see that the partial flow barrier between the southern TVSB and the northern OVSB actually occurs in the immediate vicinity of the Mono/Inyo county line. Hydrographs from monitoring wells straddling the county line, presented in Figure 6 of the Technical Report with well locations from Figure 2, also delineate this partial barrier at the county line.

Inyo's scientific request provides ample evidence that a hydrogeologic barrier exists between the TVSB and the OVSB and clearly meets both 'substantial compliance' and 'substantial evidence' evidentiary standards. DWR's decision appears arbitrary in nature and has the potential negative effect of casting doubt on the demonstrated groundwater flow relationship between Fish Slough and Tri Valleys.

The USGS's modeled amount of groundwater flow from the TVSB to OVSB (less than 1,700 AF/yr) is less than 1% of the OVSB's annual groundwater inflow (>180,000 AF/yr). The TVSB's recharge is from the White Mountains, a different source from the rest of the OVSB, which is recharged from the Sierra Nevada. These groundwater budget relationships clearly suggested the importance of separating the TVSB from the OVSB for the purpose of sustainable groundwater management.

Addition of Fish Slough as a subbasin. Although DWR provides no explanation for adding Fish Slough to the basin, Inyo County does not object to the inclusion of a Fish Slough subbasin. However, it is not clear that Fish Slough meets the criteria for an alluvial groundwater basin, as defined in Bulletin 118 (Bulletin 118, page 88):

Groundwater Basin

A groundwater basin is defined as an alluvial aquifer or a stacked series of alluvial aquifers with reasonably well-defined boundaries in a lateral direction and a definable bottom. Lateral boundaries are features that significantly impede groundwater flow such as rock or sediments with very low permeability or a geologic structure such as a fault. Bottom boundaries would include rock or sediments of very low permeability if no aquifers occur below those sediments within the basin.

In the 1960s, DWR conducted coring and trenching excavations along east-west transects across the southern end of Fish Slough as part of the "Fish Slough Dam and Reserve Feasibility Investigation, Bulletin #126." These field investigations found that: *"The selected dam site is underlain with alluvium and Bishop Tuff [volcanic rock]. The alluvial materials consist predominantly of fine-grained sandy silt derived from the surrounding Bishop Tuff; these materials overlie the Bishop Tuff on the eastern and central portion of the dam site. The alluvium is approximately 25 feet thick in the channel and tapers out on the right abutment."* Additional coring was conducted by University of California Santa Barbara on behalf of California

Department of Fish and Wildlife in 1989-90. The UCSB/CDFW cores also found a thin layer of alluvial sediments to depths of 10-15 feet before encountering volcanic tuff. Additionally, their report concluded that *“Flow through the porous and highly fractured Bishop Tuff found outlet to the surface through springs and then along the axial drainage out of the slough.”* The report also addressed potential causes to the declines seen in Fish Slough flows, *“... it is suggested that increased groundwater pumping at this time in the Chalfant Valley just to the east may be responsible.”*

The results of these two field campaigns indicated a very shallow deposit of alluvium present in Fish Slough, not meeting Bulletin 118 requirements for a groundwater basin, and that the Bishop Tuff transmits significant groundwater, which is contrary to the requirement that the bottom boundaries of groundwater basins be low permeability material. It appears that DWR has applied a more flexible interpretation of Bulletin 118’s standards to the inclusion of Fish Slough in the basin than it applied to Inyo’s request.

DWR’s recommendation to deny this basin boundary revision request may have the undesirable effect of undermining the validity of the relationship of groundwater flow from the TVSB into Fish Slough. Monitoring groundwater extractions from the Tri Valley subbasin and the Laws area in Owens Valley subbasin will be of critical importance to sustaining the health of the Fish Slough ecosystem. Creating all three subbasins (Fish Slough, OVSF, TVSB), will best serve sustainable groundwater management in all basins.

Jurisdictional considerations

Inyo submitted its request after working closely with Mono County and the TVGMD, the other local agencies with jurisdictions that include the requested basin subdivision. All three of these local agencies adopted formal resolutions in support of the request, which were included in the material submitted to DWR’s Basin Boundary Modification Request System (BBMRS).

The proposed boundary revision separates the region under the authority of the TVGMD from the area of the Owens Valley governed by the Inyo/Los Angeles Long Term Water Agreement which is treated as adjudicated under SGMA (see SGMA section 10720.8(c)). Separating these two jurisdictionally distinct regions would facilitate the formation of GSAs and GSPs within each subbasin.

There are important jurisdictional merits in creating the TVSB and the OVSF. The two primary jurisdictional representatives for the TVSB would be Mono County and TVGMD. The TVGMD is a Special Act district established by the California Legislature in 1989 in response to specific concerns related to potential groundwater exportation and overdraft. As a Special Act District, the TVGMD is deemed the exclusive local agency for the purposes of complying with SGMA (CWC 10723(c)(1)(H)). The primary sustainable groundwater management challenge would be

balancing recharge with Tri Valley usage. TVSB uses consist primarily of private entities extracting groundwater for agricultural and domestic purposes in the valleys. There is currently no groundwater export from the TVSB.

In contrast, the OVSBS groundwater management is dominated by the interaction between two public agencies, LADWP and Inyo County. LADWP is the driving force in the Owens Valley, diverting surface water and pumping groundwater for export from the OVSBS via the LA aqueduct system and for use on LADWP-owned land in Owens Valley. LADWP does not pump groundwater from the TVSB. A series of legal documents, most notably the 1991 Inyo/Los Angeles Long Term Water Agreement and associated 1991 Final Environmental Impact Report, govern LADWP groundwater extraction in the OVSBS. Although this agreement does not formally adjudicate groundwater rights, it is a court-enforceable settlement to litigation over Los Angeles's water management and Inyo County's regulatory powers. The Inyo/Los Angeles Water Agreement imposes a number of monitoring, management, and mitigation requirements on Los Angeles, including limitations on pumping, standards for siting new wells, maintenance of baseline conditions, and annual reporting of hydrologic and water-use data. For the purposes of SGMA, the OVSBS is considered adjudicated within the portion of the basin managed pursuant to the Inyo/Los Angeles Long Term Water Agreement (CWC 10720.8(c)). By separating the TVGB from the OVSBS, the complexities of developing a GSP in a partially adjudicated basin will be removed as an obstacle for the TVSB management.

The two counties and the special act district directly affected by SGMA are in unified support for this subbasin request, as shown by the three formal resolutions adopted by the three respective governing boards. These resolutions are available on the BBMRS. Furthermore, the largest water rights holder in the region, Los Angeles, did not oppose this basin boundary modification request. If approved, each subbasin can create its own GSA and GSP efficiently and effectively, the hydrogeologic relationships will be more formally recognized by this process, and the SGMA mechanisms for sustainable groundwater use will be established with greater expediency.

We understand that objections from the Big Pine Paiute Tribe (and perhaps others) made to DWR outside of the process laid out in the emergency regulations played a role in the rejection of Inyo's request. If this is true, the record should reflect as such, and not rely on an arbitrary and unsupported rejection of Inyo's technical argument on unstated technical grounds. As it stands now, the record does not merit rejection of Inyo's request. If the basis of the rejection has political elements, they should be identified.

Basin boundary modification emergency regulations compliance

Inyo, Mono and TVGMD's basin boundary modification request complies with the requirements of the California Code of Regulations; Title 23. Waters; Division 2. Department of Water Resources; Chapter 1.5; Groundwater Management; Subchapter 1. Groundwater Basin

Boundaries; Article 4. Procedures for Modification Request and Public Input, and Article 5. Supporting Information. Each of these requirements is discussed in detail below.

343.2 Eligibility to Request Boundary Modification

Inyo, Mono, and TVGMD are local agencies with jurisdiction over the proposed subbasins.

342.6 Combination of Requests

Inyo, Mono, and TVGMD combined their mutual desire to designate these subbasins into a single request, which was submitted by Inyo.

343.8 Submission Periods and 343.9 Initial Notification and 343.10 Status of Request

Inyo provided Initial Notification via the BBMRS, and has met all submission deadlines; and the request was deemed complete by DWR on March 30, 2016.

344.2 Requesting Agency Information

Inyo provided the required contact information Section A of the BBMRS; a copy of the statutory authority BBMRS Section D.1; a copy of the signed resolution formally initiating the request BBMRS Section D.2, F.3; and the name and contact information of Dr. Robert Harrington, the request manager, Section BBMRS Section A.

344.4 Notice and Consultation

Inyo provided a list of all local agencies and public water systems in the affected basin, BBMRS Section D.3, D.5, F.1; an explanation of methods used to identify affected agencies, BBMRS Section F.2; information summarizing the consultation, BBMRS Section F.2, correspondence and public meetings, BBMRS Sections F.1, F.3, F.4; and provided copies of all comments received by Inyo, with our response, BBMRS Section F.5.

344.6 Description of Proposed Boundary Modification

Inyo provided a concise description of the scientific basin boundary modification request, the category of the request, identified and named the basins and subbasins, BBMRS Section B, and also provided an explanation of the positive opportunities for sustainable groundwater management that arise from the basin modification request throughout our request packet including the Technical Report.

344.8 Local Agency Input

Inyo provided evidence that we contacted affected agencies and provided them an opportunity to comment in support or opposition, BBMRS Section F.1-5 and H.1-3.

In order to more fully meet Section 344.8.a.3 requirements, we now provide a rebuttal to the Big Pine Paiute Tribe's (BPPT) assertions made in its July 18, 2016 letter to the CWC that Inyo failed to conduct an adequate public input and outreach process. During this basin boundary modification request process, Inyo, Mono and TVGMD conducted extensive public outreach including three dedicated public workshops and 11 public meetings conducted under the Brown Act. Big Pine Paiute Tribe environmental staff attended at least four public meetings (their comments are documented in the record uploaded to the BMMRS). In addition, the Inyo County Board of Supervisors held a workshop on June 14, 2016 at the request of the BPPT where the BPPT was the sole presenter. The workshop lasted more than 2 hours; tribal concerns relating to the Inyo/LA Water Agreement and SGMA, among others, were heard and discussed.

ICWD also responded to a comment letter from the Owens Valley Committee (a local environmental group), stressing to the OVC that using a scientific basis to demonstrate the groundwater flow impedance between the TVSB and OVSF and the subsurface flow pathway from TVSB into Fish Slough was the most appropriate method to address a subbasin request. No scientific information or technical studies were presented in either the BPPT or OVC's letters (thus failing to meet the standards set forth in 344.8.c for appeals).

344.10 General Information

A description of the lateral and the definable bottom of the proposed subbasins was presented, BBMRS Sections D.4, E.1, I.4 (Hydrogeologic Conceptual Model text and Figures 1-2 & 4-6), K.2 (attachments). The source material is from the DWR Bulletin 118 description of the Owens Valley Basin with additional information from numerous USGS reports authored by Pakiser, Kane, Jackson; Bateman; and Hollett and Danskin. The graphical map and shape files were uploaded to the BBMRS, Section D.4 and D.5, with general maps in Section A and K (Figures 1&2). Of note, all these USGS professional papers are well-known, readily available online, and, in particular, the Danskin and Hollett papers are recognized as the authoritative works on the Owens Valley groundwater basin.

344.12 Hydrogeologic Conceptual Model

ICWD's hydrogeologic conceptual model was uploaded to the BBMRS, Section I. This HCM was based on extensive USGS work conducted in the 1980s and 1990s by Danskin and Hollett (USGS Water Supply Papers 2370-B and 2370-H). The 40-page HCM is a relevant summary with citations voluminous professional work that has been done on the Owens Valley and Tri Valley areas.

The principal aquifers of the OVSF and TVSB are defined in the HCM's Groundwater System,(pages 9-11); the lateral boundaries are described in Geologic Framework section (pages 4-7) and Basin Geometry and Boundaries (pages 9-10); aquifer characteristics are described in Aquifer Units and Confining Units Section (pages 10-11) and also the Groundwater Flow and Groundwater Budget (pages 12-17); key surface water features, recharge sources, and

groundwater divides are discussed in the Owens Valley Groundwater Basin (pages 1-4) and Hydrologic System (pages 7-9); recharge and discharge areas within the two subbasins are discussed in detail in Groundwater Budget section (pages 13-17); and finally, the definable bottom of the basement's dimensions was presented in numerous places see 344.10 discussion above. The key criteria described in Section 344.12 were further described in the ICWD's Technical Report. The HCM was underpinned by USGS studies, calibrated groundwater models, decades of hydrologic data, recent work by CDFW, USGS, University of California, and decades on institutional knowledge.

344.14 Technical Information for Scientific Modifications

Inyo uploaded its Technical Report, BBMRS Section K, along with 7 related and relevant professional papers. Like the HCM, Inyo's Technical Report summarizes and specifically cites the most relevant information from extensive work on the Owens Valley. A qualified map that depicts the subbasin aquifers can be found in USGS Paper 438 Plates 1.a-c, Technical Report Figures 1&2. Technical studies which provide subsurface data include Section K.2 attachments: White Mountain Geologic Quad, Bateman Plate 5. Additional subsurface information is contained in the full USGS reports noted above. ICWD demonstrated that impermeable material (subsurface bedrock high) combined with a fault system (the well-defined, USGS mapped Fish Slough fault system and associated faults) are significant impediments to subsurface groundwater flow between the TVSB and the OVSF. Evidence for the subsurface bedrock high was provided by USGS geophysical studies (gravity data) which identify a bedrock high at the boundary between the TVSB and the OVSF. The gravity anomaly is caused by the contrast in density between crystalline/metamorphic rock and alluvial sediments (BBMRS Section K.1, plates 1.a-c and Technical Report Figures 3&6). Historic and current potentiometric surface maps were provided in the HCM Figure 6; groundwater levels and hydrographs in Technical Report Figures 4 & 5; aquifer testing in the Laws/Chalfant area related to significant pumping periods and directed recharge (water spreading) in Figure 4 of the Technical Report, water quality information in HCM Groundwater Quality (page 17) and in the Technical Report section Water Quality and Characteristics (page 12). Additional support for our Scientific based boundary modification request came in the form of groundwater budgeting studies, calibrated numerical groundwater model results, and surface hydrology and topography.

344.18 CEQA Compliance

CEQA compliance was provided in Section D.1.6 of the BBMRS.

Article 6 of the emergency regulations presents the "Methodology and Criteria for Evaluation" that DWR must follow to evaluate a basin boundary revision request. Since we have been given only a cursory explanation from DWR as to the reasons for their denial of our request, we will demonstrate that Article 6 criteria are not met:

345.2 Basis for Denial of Request for Boundary Modification

(a) The proposed boundary modification may limit the opportunity or likelihood of any of the following

(1) Sustainable groundwater management in the proposed basin or subbasin

Criteria not met. Dividing the subbasins along their natural hydrogeologic basins will promote technical efforts for sustainable management by denoting the basin-specific sources of recharge and withdrawal. The subbasins will also improve the efficiency and effectiveness of the GSA/GSP for each subbasin.

(2) Sustainable groundwater management in other basins or subbasins

Criteria not met. See (1) above

(3) Groundwater storage or recharge in the proposed or adjacent basins or subbasins.

Criteria not met. The subbasin request will have no physical effect on storage or recharge in either basin

(4) Coordination of management activities and the sharing of data and information across basin or subbasin boundaries.

Criteria not met. Inyo and Mono county staffs are in close communication with each other and TVGMD representatives. Inyo County has no jurisdiction over water-management activities in Mono County and vice-versa. Inyo County makes its water-related information available on a dedicated website (www.inyowater.org), and as Mono County and TVGMD report groundwater elevations as participants in the CASGEM system.

(b) The requesting agency is unable to provide information that would allow the Department to assess whether there is a history of sustainable management of groundwater levels in the existing or proposed basin or subbasin.

Criteria not met. Inyo County is able to provide information to DWR (ICWD and LADWP Annual reports on the inyowater.org website) that shows a history of sustainable groundwater management in the OVSF. Data from the TVSF was presented in the Technical Report, and although few long-term monitoring wells exist, data exists from 1990 to date from Mono County landfill monitoring wells located in Benton and Chalfant Valleys and is available on the SWRCB's Geotracker website (geotracker.waterboards.ca.gov).

(c) For scientific modifications, if the Department does not consider that the available scientific evidence supports the addition, deletion, or relocation of a basin or subbasin boundary.

Criteria not met. We presented extensive evidence in our Hydrogeologic Conceptual Model, Technical Report, and the numerous supporting reports uploaded to the Basin Boundary modification Request System that a hydrogeologic barrier significantly impedes groundwater flow from TVSB to OVSB. This evidence was derived from reports conducted by USGS, California Universities, CDFW, BLM, ICWD, and private consultants/modelers. The evidence is geophysical, geologic, and hydrologic, and is both empirical (derived from decades of groundwater monitoring) and conceptual (derived from calibrated groundwater models of the TVSB/OVSB area). As per Section 345.4, we provided a hydrogeologic conceptual model which described the principal aquifers (unconfined and confined), the lateral boundaries, and the subsurface geologic features and faults that impede and impact groundwater flow. We also provided the directions and movement of groundwater flow, the recharge and discharge areas and water budgets for the TVSB and OVSB, and the definable bottoms to both subbasins.

DWR staff has provided only cursory insight into any technical rationale contradicting this extensive body of evidence. We have clearly met the scientific burden of proof that a hydrogeologic barrier significantly impedes groundwater flow from the TVSB to the OVSB. ICWD staff is available to address any questions or informational request from DWR staff. ICWD staff would also like to emphasize that DWR's denial of our Scientific Modification request will have the negative, if unintended, effect of undermining the technical work which demonstrates the critical groundwater connection between Fish Slough and TVSB. DWR's rejection of Inyo's request on the basis that Inyo did not submit adequate information to support its request is wholly arbitrary and unsupported.

(d) The requesting agency has failed to provide all required information or information deemed necessary by the Department or has failed to substantially comply with the requirements of this Subchapter.

Criteria not met. ICWD staff has provided all required information and no request for additional information has been made by DWR staff, nor has there been any indication that we have failed to comply with the SGMA basin modification request process or components.

(e) The proposed boundary modification could result in the isolation of areas with known groundwater management problems, or of areas, including disadvantaged communities, that may lack the institutional infrastructure or economic resources to form an effective groundwater sustainability agency or develop an implementable groundwater sustainability plan or alternative, or any other groundwater management plan.

Criteria not met. This region is already isolated, largely disadvantaged, and lacking in resources to meet SGMA's mandates. The proposed establishment of two subbasins is supported by Inyo and Mono counties and the TVGMD as a first step toward SGMA compliance. These local public agencies recognize the potential infrastructure and economic

resources that forming a GSA and developing a GSP may require, recognize the challenges that SGMA may impose on their districts, and see that the requested subbasins streamlines the process for them.

(f) The proposed boundary modification could result in the creation of unmanaged areas.

Criteria not met. The proposed boundary revision does not create unmanaged areas.

(g) An objection to a jurisdictional boundary modification has been raised by any of the following:

(1) An agency created by statute to manage groundwater.

(2) The Watermaster or other manager of an adjudicated groundwater basin or portion of a groundwater basin.

(3) An exclusive local agency for compliance with the Act within their statutory boundaries.

(4) A county in which the proposed boundary modification would occur.

Criteria not applicable, but also not met. This request is for a scientific modification; however, if the request was jurisdictional modification, none of these four criteria are met as there were no objections raised by the parties listed above. On the contrary, this request has support from a special act district recognized as an exclusive local agency, and two counties, which are the presumptive GSA's in the event of no other qualified GSA applicants.

(h) Where the Department finds that the requested boundary modification would be inconsistent with the objectives of the Act.

Criteria not met. As noted throughout this letter and as evidenced by Inyo, Mono and TVGMD's exhaustive efforts, this basin boundary modification request is thorough and complete, it is technically justified by substantial expert analysis, it was conducted in an open and fair manner with extensive outreach across two counties, and it will promote sustainable groundwater management in the two subbasins (three including Fish Slough) that it creates.

Conclusion

We feel that the partial groundwater flow barrier between the TVSB and the OVSB, the subsurface conduit from the TVSB into the Fish Slough subbasin, and the institutional boundaries between both Mono and Inyo counties and the adjudicated basins of the TVGMD and the Owens Valley clearly meet the scientific and jurisdictional criteria for defining a subbasin. The present boundaries of the Owens Valley Groundwater Basin span 125 miles. No other groundwater basin has such a large geographic extent without being subdivided into subbasins, and the dual scientific and jurisdictional basis of this request certainly provide a stronger rationale than that for many existing Bulletin 118 subbasins elsewhere in the state (e.g.,

subbasins in San Joaquin and Sacramento Valley basins, and some highly subdivided coastal basins).

The strong cooperation and consensus among local agencies affected by this request should not be disregarded. The core promise of SGMA is that groundwater management will be done by local public agencies and those same local public agencies will be held accountable by the State for meeting SGMA's mandates. When local agencies come to a unified consensus on how to best meet SGMA's requirements, as is the case here, the State should use its discretion to support the local agencies. No compelling reason has been publically presented to do otherwise. The views of other organizations, whether federal, tribal, state, or private, should rightly be considered, and were considered in the public process conducted in the development of this request; however, those other organizations hold no accountability for meeting SGMA's mandates and their views should not take precedence over those of local public agencies.

We request approval of Inyo County's request with the additional of DWR's administrative edits. Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink that reads "Bob Harrington". The signature is fluid and cursive, with a large initial "B" and "H".

Bob Harrington, Ph.D., P.G.
Director, Inyo County Water Department

Cc: County of Inyo Board of Supervisors
Board of Directors, Tri Valley Groundwater Management District
County of Mono Board of Supervisors

Via e-mail:

Inyo County Water Commission
Kevin Carunchio, Inyo CAO
Marshall Rudolph, Inyo County Counsel
Leslie Chapman, Mono CAO
Stacey Simon, Mono County Interim County Counsel
Steve Kerins, Deputy County Counsel, Mono County
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