CALIFORNIA
Water Boards

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GOVERNOR

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SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

November 14, 2014

The Honorable Gina McCarthy
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue NW (4101M)
Washington, DC 20460

The Honorable Jo-Ellen Darcy
Assistant Secretary of the Army
Department of the Army
108 Army Pentagon, Room 3E446
Washington, DC 22310-0108

WATERS OF THE UNITED STATES PROPOSED RULE
DOCKET ID NO. EPA-HQ-OW-2011-0880

Dear Administrator McCarthy and Assistant Secretary Darcy:

Thank you for the opportunity to comment on the U.S. Environmental Protection Agency and U.S. Department of the Army's (collectively the "Agencies") jointly Proposed Rule,[1] which defines the scope of "waters of the United States" protected under the federal Clean Water Act (CWA) in light of recent U.S. Supreme Court cases. The California State Water Resources Control Board (State Water Board), in conjunction with the nine California regional water quality control boards (collectively, "Water Boards"), is designated as California's water pollution control agency for the CWA. The Proposed Rule will affect all of the CWA programs that are administered by the Water Boards, including section 401 water quality certification, section 402 permitting, and section 303 water quality standards. Therefore, please accept the following general comments, as well as the attached specific comments, on the Proposed Rule on behalf of staff of the Water Boards.

We strongly support the Agencies' intent to adopt regulations to provide clarity to the definition of "waters of the United States" in order to improve efficiency, consistency, and predictability while protecting water quality, public health, and the environment. Protection of water resources is of utmost importance in California. The availability of clean water, now and in the future, is vital to maintaining the health of our communities, businesses, agriculture, and natural environment, especially in the face of climate change and increased demand from a growing population. A comprehensive rulemaking represents a major improvement over the status quo, which is distinguished primarily by case-by-case jurisdictional determinations resulting in a patchwork of fact-specific, sometimes conflicting, judicial decisions. Neither the economy nor the environment is well served by the current regulatory uncertainty.

We also strongly support the Agencies' science-based approach to the rulemaking, particularly with respect to further defining the types of water bodies that are considered to be "waters of the

[1] As published in 79 Fed. Reg. 22188-22274 (April 21, 2014)

United States" because they significantly affect the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas.

For example, the inclusion of all tributaries (including headwaters, ephemeral and intermittent streams, and tributary wetlands and ponds) as jurisdictional waters is an important step in protecting water quality in California. Both the Agencies' peer-reviewed scientific report and the Science Advisory Board's October 17, 2014 review of the Agencies' report correctly recognize the importance of all tributaries in maintaining the biological, physical, and chemical integrity of downstream waters. As shown in Attachment A of this letter, intermittent and ephemeral streams cover a significant portion of California's surface area. As recommended by the Science Advisory Board in its September 30, 2014 letter to the Agencies, however, the Agencies should consider whether the proposed definition of "tributary" actually includes all ephemeral streams as intended, but also clearly distinguishes such tributaries from excluded non-tributary ditches. In addition, natural discontinuous channels in dry land stream systems should also be considered to be tributaries, even when there are one or more natural breaks in the channel.

Similarly, we support the proposed definition of "adjacent" waters as applying to all types of waters, not just wetlands. We also support the proposed definition of "neighboring" waters to include waters within "riparian" areas and "floodplains," as well as waters with a hydrologic connection to jurisdictional waters, because the science clearly indicates that these types of waters have a significant nexus to the jurisdictional waters.

These proposed new definitions of types of "waters of the United States" offer increased clarity and consistency, which will result in more efficient and effective protection of headwaters, streams, their associated wetlands, and adjacent waters. This is important in states such as California that are characterized by a broad diversity of landscapes, climate, and hydrology. To the extent that the science justifies defining additional types of waters as "waters of the United States," either now or in the future, we would support doing so for the same reasons. For example, as suggested by the Science Advisory Board in its September 30, 2014 letter to the Agencies, the Agencies should consider whether geographically-based subcategories of similarly situated "other waters" have a significant nexus to jurisdictional waters. To the extent that is necessary to continue to rely instead on case-by-case significant nexus determinations, however, we generally support the framework of the Proposed Rule for similarly situated "other waters."

As recommended by the Scientific Advisory Board in its September 30, 2014 letter to the Agencies, the Agencies should also consider whether non-wetland swales and other features that provide hydrologic connectivity to and between wetland complexes, such as vernal pools, should be excluded if they directly contribute flows, and function as part of the tributary system to jurisdictional waters, even though they lack an ordinary high water mark and bed and bank. Additionally, while we generally support the exclusion of ditches, gullies, and rills from "waters of the United States," we recommend that these features be defined to avoid confusion. To the extent that any excluded features can contribute flow to waters of the United States, the Agencies should clarify that they may be considered point sources, as long as they are not statutorily exempt from regulation under the CWA.

Some states, including California, have state laws that supplement the CWA's authority to protect certain types of water bodies. Even so, we appreciate the necessity of relying on the authority provided by CWA section 401 to regulate discharges to waters of the United States, especially for discharges associated with projects licensed by the Federal Energy Regulatory

Commission. A narrow definition of "waters of the United States" would mean that state authority over more of these types of projects would be preempted by the Federal Power Act.

In a similar vein, we rely heavily on the Agencies' activities under the section 404 dredge and fill program to leverage our limited staff resources in the section 401 water quality certification program. A narrow definition of "waters of the United States" would require additional state resources to achieve the same level of protection as is afforded under the section 404 program today. By contrast, the proposed definition of "waters of the United States" will not increase the type and number of water bodies that are protected only under state law, and will also reduce the number of case-by-case determinations. This will facilitate the processing of CWA section 401 certification applications, and decrease Water Boards staffs' time spent on ensuring that impacts to waters are addressed and appropriately mitigated and monitored. Improved alignment of federal and state jurisdictional waters will also likely decrease permit processing time to the benefit of applicants.

In addition to these general comments, please find our specific comments on the language of the Proposed Rule in Attachment B to this letter. We appreciate the Agencies' outreach to state agencies in discussing this rulemaking effort and encourage the Agencies to continue to consult with the states as the Agencies consider the public comments and the rulemaking moves forward. Once the rulemaking is final, we encourage continued early outreach and coordination, particularly when making jurisdictional determinations pursuant to the newly-adopted "waters of the United States" rule.

Thank you for considering these comments. If you have any questions regarding this submittal, please do not hesitate to call Bill Orme, Chief of the State Water Resources Control Board's Water Quality Certification Unit, at (916) 341-5464. You may also email him at: Bill.Orme@waterboards.ca.gov.

Sincerely,

Thomas Howard
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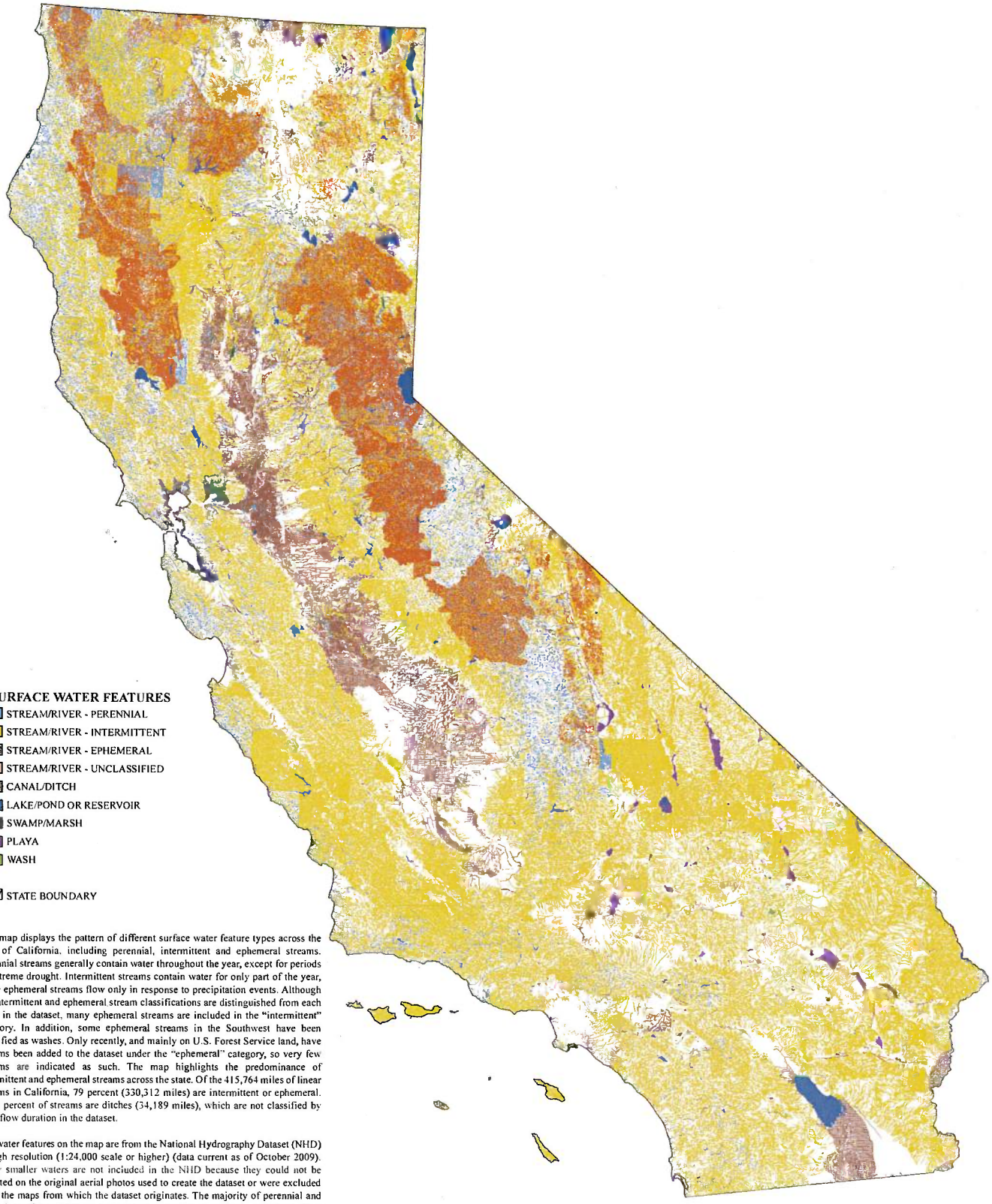
EPA-HQ-OW-2011-0880

STREAMS AND WATERBODIES IN CALIFORNIA

Attachment A

The National Hydrography Dataset



SURFACE WATER FEATURES

- STREAM/RIVER - PERENNIAL
- STREAM/RIVER - INTERMITTENT
- STREAM/RIVER - EPHEMERAL
- STREAM/RIVER - UNCLASSIFIED
- CANAL/DITCH
- LAKE/POND OR RESERVOIR
- SWAMP/MARSH
- PLAYA
- WASH

STATE BOUNDARY

0 100 200 400
Miles

This map displays the pattern of different surface water feature types across the state of California, including perennial, intermittent and ephemeral streams. Perennial streams generally contain water throughout the year, except for periods of extreme drought. Intermittent streams contain water for only part of the year, while ephemeral streams flow only in response to precipitation events. Although the intermittent and ephemeral stream classifications are distinguished from each other in the dataset, many ephemeral streams are included in the "intermittent" category. In addition, some ephemeral streams in the Southwest have been classified as washes. Only recently, and mainly on U.S. Forest Service land, have streams been added to the dataset under the "ephemeral" category, so very few streams are indicated as such. The map highlights the predominance of intermittent and ephemeral streams across the state. Of the 415,764 miles of linear streams in California, 79 percent (330,312 miles) are intermittent or ephemeral. Eight percent of streams are ditches (34,189 miles), which are not classified by their flow duration in the dataset.

The water features on the map are from the National Hydrography Dataset (NHD) at high resolution (1:24,000 scale or higher) (data current as of October 2009). Many smaller waters are not included in the NHD because they could not be detected on the original aerial photos used to create the dataset or were excluded from the maps from which the dataset originates. The majority of perennial and most intermittent streams are captured at this resolution. However, most ephemeral streams are not captured unless they are in the arid west. Additional information on the NHD can be obtained from the NHD website at https://nhd.usgs.gov.

USGS science for a changing world

Prepared by INDUS Corporation under contract with
U.S. Environmental Protection Agency
Office of Water – Washington, DC
Ocotober 2013

The following specific comments are provided by the California State Water Resources Control Board and the nine California regional water quality control boards (collectively, the "Water Boards") staff regarding the proposed "Definition of 'Waters of the United States' Under the Clean Water Act" (Proposed Rule) for 40 CFR 230.3. Specific recommended changes to the proposed regulations are shown in ~~strikeout~~/underline format. Additional comments are presented as endnotes.

Proposed "Definition of 'Waters of the United States' Under the Clean Water Act"
40 CFR 230.3

(s) For purposes of all sections of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (t) of this section, the term "waters of the United States" means:

(1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters, including interstate wetlands;

(3) The territorial seas;

(4) All impoundments of waters identified in paragraphs (s)(1) through (3) and (5) of this section;

(5) All tributaries of waters identified in paragraphs (s)(1) through (4) of this section;

(6) All waters, including wetlands, adjacent to a water identified in paragraphs (s)(1) through (5) of this section; and

(7) On a case-specific basis, other waters, including wetlands, provided that those waters alone, or in combination with other similarly situated waters, including wetlands, located in the same region, have a significant nexus to a water identified in paragraphs (s)(1) through (3) of this section.

(t) The following are not "waters of the United States" notwithstanding whether they meet the terms of paragraphs (s)(1) through (7) of this section—

(1) Waste treatment systems, including treatment ponds, ~~or~~ lagoons, and storm water detention basins,[1] designed and used[2] to meet the requirements of the Clean Water Act and not constructed in a waters of the United States.[3]

(2) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act the final authority regarding Clean Water Act jurisdiction remains with EPA.

(3) Ditches that are excavated wholly in uplands, drain only uplands, and have less than ~~perennial~~ intermittent[4] flow.

(4) Ditches that do not contribute flow, either directly or through another water, to a water identified in paragraphs (s)(1) through (4) of this section.

(5) The following features:

(i) Artificially irrigated areas that would revert to upland should application of irrigation water to that area cease;

(ii) Artificial lakes or ponds created by excavating and/or diking dry land and used

exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(iii) Artificial reflecting pools or swimming pools created by excavating and/or diking dry land;

(iv) Small ornamental waters created by excavating and/or diking dry land for primarily aesthetic reasons;

(v) Water-filled depressions created incidental to construction activity that are not part of an interconnected network of waters of the United States;[5]

(vi) Groundwater, including groundwater drained through subsurface drainage systems; and

(vii) Gullies and rills and non-wetland swales.[6]

(u) Definitions—

(1) *Adjacent.* The term *adjacent* means bordering, contiguous or neighboring. Waters, including wetlands, separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are "adjacent waters."

(2) *Neighboring.* The term *neighboring,* for purposes of the term "adjacent" in this section, includes waters located within the riparian area or floodplain of a water identified in paragraphs (s)(1) through (5) of this section, or waters with a shallow subsurface hydrologic connection[7] or confined surface hydrologic connection to such a jurisdictional water.

(3) *Riparian area.* The term *riparian area* means an area bordering a water where surface or subsurface hydrology directly influence the ecological processes and plant and animal community structure in that area. Riparian areas are transitional areas between aquatic and terrestrial ecosystems that influence the exchange of energy and materials between those ecosystems.[8]

(4) *Floodplain.* The term *floodplain* means an area bordering inland or coastal waters that was formed by sediment deposition from such water under present climatic conditions and is inundated during periods of moderate to high water flows.

(5) *Tributary.* The term *tributary* means a water physically characterized by the presence of a bed and banks and ordinary high water mark, as defined at 33 CFR 328.3(e), which contributes flow, either directly or through another water, to a water identified in paragraphs (s)(1) through (4) of this section. In addition, wetlands[9] lakes, and ponds are tributaries (even if they lack a bed and banks or ordinary high water mark) if they contribute flow, either directly or through another water to a water identified in paragraphs (s)(1) through (3) of this section. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more man-made breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands at the head of or along the run of a stream, natural discontinuous channels in dryland stream systems,[10] debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A tributary, including wetlands, can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, lakes, ponds, impoundments, canals, and ditches not excluded in paragraph (t)(3) or (4) of this section.

(6) *Wetlands.* The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in

saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

(7) *Significant nexus.* The term *significant nexus* means that a water, including wetlands, either alone or in combination with other similarly situated waters in the region (i.e., the watershed that drains to the nearest water identified in paragraphs (s)(1) through (3) of this section), significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (s)(1) through (3) of this section. For an effect to be significant, it must be more than speculative or insubstantial. Other waters, including wetlands, are similarly situated when they perform similar functions and are located sufficiently close together or sufficiently close to a "water of the United States" so that they can be evaluated as a single landscape unit with regard to their effect on the chemical, physical, or biological integrity of a water identified in paragraphs (s)(1) through (3) of this section.[11]

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[1] Stormwater detention basins and other constructed water-dependent stormwater treatment systems should also qualify for this exclusion.

[2] If a waste treatment system is abandoned or otherwise ceases to serve the treatment function it was designed for, it should not continue to qualify for the exclusion.

[3] Generally, waste treatment systems that are constructed within a water of the United States should not qualify for this exclusion. There may be some existing waste treatment systems that were constructed within a water of the United States that the Agencies affirmatively determined ceased to be a water of the United States; those determinations should remain in effect.

[4] The distinction between ditches excluded under proposed (t)(3) and ditches that meet the proposed definition of "tributary" is not clear, because "tributary" includes man-made ditches. If the ditch is not connected to a water of the United States and is not abandoned, then the flow regime may not be relevant. For ditches that are connected to waters of the United States, if the intent of the proposed (t)(3) exclusion is to be consistent with the significant nexus test, then an intermittent flow regime would be more appropriate than a permanent flow regime, particularly for arid and semi-arid areas. Alternatively, the simplest approach may be to treat all ditches that are excavated wholly in uplands and drain only uplands as potential point sources, rather than waters of the United States, without regard to flow regime. This approach could be limited to ditches that are not abandoned, and would include the upland portions of municipal separate storm sewer systems.

[5] There are cases where after a number of years of inactivity, water filled depressions created incidental to construction activity become habitat for plants and animals and support other designated uses. These water-filled depressions may be considered to be waters of the United States if they are interconnected with other waters of the United States.

[6] Non-wetland swales that contribute flow to waters of the United States may be considered waters of the United States. See endnote 9.

[7] We support the proposed definition of "neighboring." However, guidance should be provided on how to determine whether there is a "shallow subsurface hydrologic connection" for the purpose of this exclusion.

[8] We support the definition of "riparian," because it is consistent with scientific evidence that riparian areas are areas through which surface and subsurface hydrology interconnect aquatic

areas and connect them with their adjacent uplands (Brinson et al., 2002). They are distinguished by gradients in biophysical conditions, ecological processes, and biota. They can include wetlands, aquatic support areas, and portions of uplands that significantly influence the conditions or processes of aquatic areas.

[9] We support the proposed language including wetlands as tributary. However, the Agencies should consider whether interconnecting non-wetland swales that provide critical hydrologic connectivity to wetland complexes should be excluded. In California, this is commonly found in vernal pool complexes. Although vernal pools may be considered jurisdictional, swales that provide chemical, physical, and biological connectivity would be excluded. For clarity, we suggest that the Agencies consider whether to add "interconnecting swales" to clarify that interconnecting swales in wetland complexes should be considered jurisdictional because they directly contribute flows and function as part of the tributary system to waters of the United States.

We agree that gullies and rills, and non-wetland swales in upland areas that are purely erosional features and do not contribute flow, either directly or through another water, to waters of the United States correctly should not be considered jurisdictional by rule. However, as suggested by the Scientific Advisory Board, the Agencies should consider whether non-wetland swales in arid and semi-arid environments and low gradient landscapes should be included as tributaries if they contribute flow to waters of the United States (particularly headwaters in zero order basins), regardless of the presence of an ordinary high water mark. There are many ephemeral and intermittent tributaries in the arid West, such as those ephemeral channels that are tributary to the Mojave River and Amargosa River in California. As shown on the National Hydrography Dataset (NHD) high resolution map (Attachment A), the majority of streams in California (79 percent) are intermittent or ephemeral (INDUS Corporation, 2013).

Headwaters undergo geomorphic processes, such as erosion and incision, which may take the initial form of non-wetland swales. Therefore, these headwater features can significantly affect the chemical, physical, and biological integrity of waters of the United States. The importance of headwater stream systems is noted throughout the preamble to the Proposed Rule on page 22201: "The great majority of tributaries are headwater streams, and whether they are perennial, intermittent, or ephemeral, they play an important role in the transport of water, sediments, organic matter, nutrients, and organisms to downstream environments. Tributaries serve to store water, thereby reducing flooding, provide biogeochemical functions that help maintain water quality, trap and transport sediments, transport, store and modify pollutants, provide habitat for plants and animals, and sustain the biological productivity of downstream rivers, lakes and estuaries." Additionally, the preamble to the Proposed Rule clearly recognizes on page 22206 the benefits of headwater and ephemeral streams: "[t]ributaries that are small, flow infrequently, or are a substantial distance from the nearest (a)(1) through (a)(3) water (e.g., headwater perennial, intermittent, and ephemeral tributaries) are essential components of the tributary network and have important effects on the chemical, physical, and biological integrity of (a)(1) through (a)(3) waters, contributing many of the same functions downstream as larger streams. When their functional contributions to the chemical, physical, and biological conditions of downstream waters are considered at a watershed scale, the scientific evidence supports a legal determination that they meet the "significant nexus" standard articulated by Justice Kennedy in *Rapanos*."

[10] We note that there are ephemeral and intermittent streams in arid and semi-arid regions that are commonly referred to as "drylands" (Levick et al., 2008; CDFG, 2010). Natural

discontinuous channels in dryland stream ephemeral channels are characterized by alternating erosional and depositional reaches that may vary in length (USACE, 2008). These channels are constantly in flux and are characterized by temporal and spatial changes in channel morphology for any given location. These systems are subject to prolonged wet and dry cycles and typically have many years of discontinuous flows. Since jurisdiction should be based on physical structure rather than the vagaries of climate, these features when contributing flow either directly or through another water to a water of the United States, should be considered jurisdictional.

[11] We support the proposed "significant nexus" definition, including specifically, "a water, including wetlands, either alone or in combination with other similarly situated waters in the region (i.e., the watershed that drains to the nearest water identified in paragraphs (s)(1) through (3) of this section), significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (s)(1) through (3) of this section." Making the determination of "similarly situated" waters should be done at the watershed level (for these purposes, the term watershed should mean all areas resulting from the first subdivision of a subbasin). Certainty that waters are "similarly situated" and thus similarly affecting the chemical, physical, or biological integrity of jurisdictional waters increases when the area of analysis is confined to a watershed where, by definition, all waters flow to a common point. Although waters within an ecoregion could similarly affect chemical, physical, or biological integrity of a jurisdictional water, the large scale of ecoregions would greatly complicate the analysis and provide more opportunities for challenges to the jurisdictional determinations.

In addition, we recommend that the Agencies make it clear that the existence of a significant nexus may be reassessed in cases where new permanent changes in hydrology occur, through natural or man caused events (e.g., climate change), altering hydrologic flows. In such cases, a water previously determined not to be jurisdictional under the rule, may be found to be jurisdictional in its new altered condition.

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