DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AF73

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Tidewater Goby

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U. S. Fish and Wildlife Service, propose designation of critical habitat pursuant to the Endangered Species Act of 1973, as amended (Act), for the tidewater goby (*Eucyclogobius newberryi*). The species is now classified as endangered throughout its entire range. We recently determined, however, that north of Orange County, California, more populations exist than were known at the time of the listing, that the threats to those populations are less severe than previously believed, and that the tidewater goby has a greater ability than was known in 1994 to recolonize habitats from which it is temporarily absent. Based on this new information, we recently proposed removal of the northern populations of tidewater goby from protection under the Act. We also determined that the Orange and San Diego, California, Counties population of tidewater gobies constitutes a distinct population segment (DPS) that is genetically distinct and that continues to be threatened by habitat loss and degradation, predation by non-native species, and extreme weather and streamflow conditions. Therefore, we proposed that this DPS be retained as an endangered species on the List of Endangered and Threatened Wildlife. This proposed critical habitat designation for the tidewater goby encompasses areas within that proposed DPS. Section 4 of the Act requires us to consider economic and other impacts of specifying any particular area as critical habitat. We solicit data and comments from the public on all aspects of this proposal, including data on the economic and other impacts of the designation. We may revise this proposal to incorporate or address new information received during the comment period.

DATES: We will accept comments from all interested parties until October 4, 1999. Public hearing requests must be received by September 17, 1999.

ADDRESSES: Send written comments and other materials concerning this proposal to Mr. Ken Berg, Field Supervisor, Carlsbad Fish and Wildlife Office, 2730 Loker Avenue West, Carlsbad, California 92008. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Glen Knowles at the above address; telephone 760/431–9440, facsimile 760/431–5902.

SUPPLEMENTARY INFORMATION:

Background

The tidewater goby (*Eucyclogobius newberryi*) is a small, elongate, grey-brown fish not exceeding 50 millimeters (mm) (2 inches (in.)) standard length and is characterized by large, dusky pectoral fins and a ventral sucker-like disk formed by the complete fusion of the pelvic fins. The tidewater goby is a short-lived species, apparently having an annual life cycle (Irwin and Soltz 1984, Swift *et al.* 1997). The tidewater goby is the only member of the monotypic genus *Eucyclogobius*, and is in the family Gobiidae. It was first described in 1857 by Girard as *Gobius newberryi*. Based on Girard's specimens, Gill (1862) erected the genus *Eucyclogobius* for this distinctive species. The majority of scientists have accepted this classification (e.g., Bailey *et al.* 1970, Miller and Lea 1972, Hubbs *et al.* 1979, Robins *et al.* 1991, Eschmeyer *et al.* 1983). A few older works including Ginsburg (1945) placed the tidewater goby and the eight related eastern Pacific species into the genus *Lepidogobius*. This classification includes the currently recognized genera *Lepidogobius, Clevelandia, Ilypnus, Quietula*, and *Eucyclogobius*. Birdsong *et al.* (1988) coined the informal *Chasmichthys* species group, recognizing the phyletic relationship of the eastern Pacific group with species in the northwestern Pacific.

Crabtree's (1985) allozyme work on tidewater gobies from 12 localities throughout the range shows fixed allelic differences at the extreme northern (Lake Earl, Humboldt Bay) and southern (Cañada de Agua Caliente, Winchester Canyon, and San Onofre Lagoon) ends of the range. The northern and southern populations are genetically distinct from each other and from the central populations sampled. The more centrally distributed populations are relatively similar to each other (Brush Creek, Estero Americano, Corcoran Lagoon, Arroyo de Corral, Morro Bay, Santa Ynez River, and Jalama Creek). Crabtree's results indicated that there is a low level of gene flow (movement of individuals) among the northern, central, and southern parts of the range. However, Lafferty *et al.* (in prep.) point out that Crabtree's sites were widely distributed geographically, and may not be indicative of gene flow on more local levels. Lafferty's work is discussed in more detail below.

David Jacobs (University of California, Los Angeles, Department of Organismic Biology, Ecology and Evolution, *in litt.*, 1998) recently began an analysis of mitochondrial genetic material from tidewater goby populations ranging from Humboldt to San Diego Counties. Preliminary results indicate that the San Diego gobies have long been separated from other gobies along the coast. These southernmost populations likely began diverging from the remainder of the gobies in excess of 100,000 years ago.

The tidewater goby is endemic to California, and is unique in that it is restricted to coastal brackish water habitats. Historically, the species ranged from Tillas Slough (mouth of the Smith River, Del Norte County) near the Oregon border to Agua Hedionda Lagoon (northern San Diego County). Within the range of the tidewater goby, shallow, brackish water conditions occur in two relatively distinct situations: (1) The upper edge of tidal bays, such as Tomales, Bolinas, and San Francisco Bays near the entrance of freshwater tributaries, and (2) the coastal lagoons formed at the mouths of small to large coastal rivers, streams, or seasonally wet canyons, along most of the length of California. Few well authenticated records of this species are known from marine environments outside of enclosed coastal lagoons and estuaries (Swift *et al.* 1989).

The tidewater goby is often found in waters of relatively low salinities (around 10 parts per thousand (ppt)) in the uppermost brackish zone of larger estuaries and coastal lagoons. The fish can tolerate a wide range of salinities, however, (Swift *et al.* 1989, 1997; Worcester 1992, Worcester and Lea 1996), and is frequently found throughout lagoons. Tidewater gobies regularly range upstream into fresh water, and downstream into water of up to 28 ppt salinity (Worcester 1992, Swenson 1995). Specimens have also been collected at salinities as high as 42 ppt (Swift *et al.* 1989). The species' tolerance of high salinities (up to 60 ppt for varying time periods) likely enables it to withstand exposure to the marine environment, allowing it to colonize or re-establish in lagoons and estuaries following flood events (Swift *et al.* 1989; Worcester and Lea 1996; Lafferty *et al.* in prep.).

Tidewater gobies are usually collected in water less than 1 meter (m) (3 feet (ft)) deep; many localities have no area

deeper than this (Wang 1982, Irvin and Soltz 1984; Swenson 1995). However, it has been found in waters over 1 m in depth (Worcester 1992, Lafferty and Altstatt 1995; Swift *et al.* 1997; Smith 1998). In lagoons and estuaries with deeper water, the failure to collect gobies may be due to the inadequacy of the sampling methods, rather than the lack of gobies (Worcester 1992, Lafferty 1997, Smith 1998).

Tidewater gobies often migrate upstream into tributaries up to 2.0 kilometers (km) (1.2 miles) (mi) from the estuary. However, in San Antonio Creek and the Santa Ynez River in Santa Barbara County, tidewater gobies are often collected 5–8 km (3–5 mi) upstream of the tidal or lagoonal areas, sometimes in beaver-impounded sections of streams (Swift *et al.* 1989). The fish move upstream in summer and fall, as sub-adults and adults. There is little evidence of reproduction in these upper areas (Swift *et al.* 1997).

Populations originally inhabiting tidal areas, such as those found in San Francisco Bay, rarely were studied before they disappeared, and none remain to adequately study the use of truly tidal conditions by this species. Several of the lagoonal habitats have been converted by human activities into tidal harbors and bays, such as Humboldt Bay, Elkhorn Slough, Morro Bay and Santa Margarita River, among others (Swift *et al.* 1989, 1993). Populations recently present in these artificially created tidal situations have disappeared in the last 5 to 10 years. The only tidal system in which tidewater gobies remain is Humboldt Bay (Swift *et al.* 1989).

The life history of tidewater gobies is keyed to the annual cycles of the coastal lagoons and estuaries (Swift *et al.* 1989, 1994; Swenson 1994, 1995). Water in estuaries, lagoons and bays is at its lowest salinity during the winter and spring as a result of precipitation and runoff. During this time, high runoff causes the sandbars at the mouths of the lagoons to breach, allowing mixing of the relatively fresh estuarine and lagoon waters with seawater. This annual building and breaching of the sandbars is part of the normal dynamics of the systems in which the tidewater goby has evolved (Zedler 1982, Lafferty and Alstatt 1995, Heasly *et al.* 1997). The time of sandbar closure varies greatly among systems and years, and typically occurs from spring to late summer. Summer salinity in the lagoon depends upon the amount of freshwater inflow at the time of sandbar formation (Zedler 1982, Heasly *et al.* 1997).

Males begin digging breeding burrows 75 to 100 mm (3–4 in.) deep, usually in relatively unconsolidated, clean, coarse sand averaging 0.5 mm (0.02 in.) in diameter, in April or May (Swift *et al.* 1989; Swenson 1994, 1995). Swenson (1995) demonstrated that tidewater gobies prefer this substrate in the laboratory, but also found tidewater gobies digging breeding burrows in mud in the wild (Swenson 1994). Inter-burrow distances range from about 5 to 275 centimeters (cm) (2 to 110 in) (Swenson 1995). Females lay about 100 to000 eggs per clutch, averaging 400 eggs/clutch, with clutch size depending on the size of both the female and the male. Females can lay more than one clutch of eggs over their lifespan, with captive females spawning 6–12 times (Swenson 1995). Spawning frequency in wild females probably varies due to fluctuations in food supply and other environmental conditions. Male gobies remain in the burrow to guard the eggs that are attached to sand grains in the walls of the burrow. Males also spawn more than once per season (Swenson 1995), and have been observed guarding multiple clutches in the same burrow (Swift *et al.* 1989, Swenson 1995). Males frequently go at least for a few weeks without feeding, and this probably contributes to mid-summer mortality (Swift *et al.* 1989; Swenson 1994, 1995).

Reproduction peaks during spring to mid-summer, late April or May to July, and can continue into November or December depending on the seasonal temperature and rainfall. Reproduction sometimes increases slightly in the fall (Swift *et al.* 1989). Reproduction takes place from 15–20 degrees Celsius (°C) (60–65 degrees Fahrenheit (°F)) and at salinities of 0–25 ppt (Swift *et al.* 1989; Swenson 1994, 1995). Typically, winter rains and cold weather interrupt spawning, but in some warm years reproduction may occur throughout the year (Goldberg 1977, Wang 1984). Goldberg (1977) showed by histological analysis that females have the potential to lay eggs all year in southern California, but this rarely has been documented. Length-frequency data from southern and central California (Swift *et al.* 1989; Swenson 1994, 1995) and age data analysis from otoliths from central California populations (Swift *et al.* 1997) indicate that tidewater gobies are an annual species and typically live one year or less.

Tidewater goby eggs hatch in 7–10 days at temperatures of 15–18 °C (60–65 °F) at lengths of 4–7 mm (0.2 in.). The newly hatched larvae are planktonic (float in water column) for one to a few days and once they reach 8–18 mm (0.3–0.8 in.) in length, become substrate oriented. All larger size classes are substrate oriented and, although little habitat segregation by size has been noted (Swift *et al.* 1989, Swenson 1995), Worcester (1992) did find that larval gobies in Pico Creek Lagoon tended to use the deeper portion of the lagoon. Individuals collected in marshes appear to be larger (43–45 mm (1.7–1.8 in.) standard length) than those collected in open areas of lagoons (32–35 mm (1.3–1.4 in.) standard length) (Swenson 1995).

Studies of the tidewater goby's feeding habits suggest that it is a generalist. At all sizes examined, tidewater gobies feed on small invertebrates, usually mysids, amphipods, ostracods, snails, and aquatic insect larvae, particularly dipterans (Irwin and Soltz 1984; Swift *et al.* 1989; Swenson 1994, 1995). The food items of the smallest tidewater gobies (4–8 mm (0.2–0.3 in.)) have not been examined, but they probably feed on unicellular phytoplankton or zooplankton similar to many other early stage larval fishes (Swenson and McCray 1996).

Tidewater gobies are preyed upon by native species such as prickly sculpin (*Cottus asper*), staghorn sculpin (*Leptocottus armatus*), starry flounder (*Platichthys californicus*) (Swift *et al.* 1997), and possibly steelhead (*Oncorhynchus mykiss*) (Swift *et al.* 1989). However, tidewater gobies were found in stomachs of only 6 percent of nearly 120 of the latter three species examined, and comprised less than 20 percent by volume of the prey. Predation by the native Sacramento perch (*Archoplites interruptus*) and tule perch (*Hysterocarpus traski*) may have prevented tidewater gobies from inhabiting the San Francisco Bay delta (Swift *et al.* 1989), although direct documentation to support this hypothesis is lacking.

Non-native African clawed frogs (*Xenopus laevis*) also prey upon tidewater gobies (Lafferty and Page 1997), although this is probably not a significant source of mortality due to the limited distribution of this species in tidewater goby habitats. The frogs are killed by the higher salinities that occur when the lagoons are breached (Glenn Greenwald, U.S. Fish and Wildlife Service, pers. obs.). Several non-native fish species also prey on tidewater gobies. The shimofuri goby (*Tridentiger bifasciatus*), which has become established in the San Francisco Bay region (Matern and Fleming 1995), may compete with the smaller tidewater goby, based on dietary overlap (Swenson 1995) and foraging and reproductive behavioral alterations in captivity. Shimofuri gobies eat juvenile tidewater gobies in captivity, but

usually were unable to catch subadult and adult tidewater gobies (Swenson and Matern 1995). Evidence of predation or competition in the wild is lacking (Swenson 1998). Some authors hypothesize that competition occurs between tidewater gobies and yellowfin (*Acanthogobius flavimanus*) and chameleon (*Tridentiger trigonocephalus*) gobies. Although Wang (1984) found that yellowfin gobies do prey on tidewater gobies, no data were presented indicating the extent of such interactions, nor has there been any further documentation of such competitive or predatory interactions with either species. Shapovalov and Taft (1954) documented the non-native striped bass (*Morone saxatilis*) preying on tidewater gobies in Waddell Creek Lagoon, but stated that striped bass were found only infrequently in the areas inhabited by the goby. Sunfishes and black bass (centrarchids) have been introduced in or near coastal lagoons and may prey heavily on tidewater gobies under some conditions. Predation by young-of-the-year largemouth bass (*Micropterus salmoides*) on tidewater gobies was documented in one system (Santa Ynez River), where tidewater gobies accounted for 61 percent of the prey volume of 55 percent (10 of 18) of the juvenile bass sampled (Swift *et al.* 1997). Although tidewater gobies disappeared soon after centrarchids were introduced at several localities, direct evidence that the introductions led to the extirpations is lacking (Swift *et al.* 1989, 1994; Rathbun *et al.* 1991). In at least one location, tidewater gobies have re-established naturally.

Lafferty *et al.* (in prep.) monitored persistence of 17 tidewater goby populations in Santa Barbara and Los Angeles Counties during and after the heavy winter flows of 1995. All 17 populations persisted after the high flows and no significant changes in population sizes were detected. In addition, gobies apparently colonized Cañada Honda, approximately 10 km (6 mi) from the closest known population, during or after the flooding (Swift *et al.* 1997). Lafferty *et al.* (in prep.) proposed that flood events such as those that occurred in 1995 act as mechanisms of dispersal by washing gobies out into the ocean's littoral zone where they are carried by longshore currents to other estuaries down the coast. As Swenson (in prep.) points out, Lafferty's work suggests that populations at the northern ends of population clusters are more likely than southern populations to serve as source populations. Lafferty *et al.* (in prep.) estimated the extirpation and recolonization rates for 37 populations in southern California, based on over 250 presence-absence records, found a high rate of recolonization. The results suggest that there is more gene flow among populations within geographic clusters (e.g., northern California, San Francisco Bay, Santa Cruz, San Luis Obispo and south) than previously believed. They also found a positive association between tidewater goby presence and wet years, suggesting that flooding may contribute to recolonization of sites from which gobies have temporarily disappeared.

Lagoons in which tidewater gobies are found range in size from less than 0.10 hectare (ha) (0.25 acres (ac)) of surface area to about 800 ha (2000 ac). Most lagoons with tidewater goby populations are in the range of 0.5–5.0 ha (1.25–12.5 ac). Surveys of tidewater goby localities and historical records indicate that size, configuration, location, and access by humans are all related to persistence of populations (Swift *et al.* 1989, 1994). Watered surface areas smaller than about 2 ha (5 ac) generally have histories of extinction, extirpation, or population reduction to very low levels, although some as small as 0.35 ha (0.86 ac) have been identified as having permanent tidewater goby populations (Swift *et al.* 1997, Lafferty 1997, Heasly *et al.* 1997). As evidenced by the Cañada Honda colonization (Swift *et al.* 1997), relatively long distances are not obstacles to colonization or re-establishment. Many of the small lagoons with histories of intermittent populations are within 1–2 km (0.6–1.2 mi) of larger lagoons that can act as sources of colonizing gobies.

The largest localities have not proven to be the best for the species, as evidenced by the loss of tidewater gobies from San Francisco and Morro Bays and the Santa Margarita River estuary. Today, the most stable and largest populations are in lagoons and estuaries of intermediate sizes, 2–50 ha (5–125 ac) that have remained relatively unaffected by human activities, although some systems that are heavily affected or altered also have relatively large, stable populations (e.g., Humboldt Bay, Humboldt County, Santa Clara River, Ventura County, Santa Ynez River, Santa Barbara County, Pismo Creek, and San Luis Obispo County). In many cases, these probably have provided the colonists for the smaller ephemeral sites (Swift *et al.*1997; Lafferty *et al.* in prep.).

Previous Federal Action

We first classified the tidewater goby as a Category 2 candidate species in 1982 (47 FR 58454). It was reclassified as a Category 1 candidate in 1991 (56 FR 58804) based on status and threat information in Swift *et al.* (1989). At that time, Category 2 candidates were those taxa for which information in our possession indicated that proposing to list as endangered or threatened was possibly appropriate, but for which conclusive data on biological vulnerability and threats were not currently available to support a listing proposal. Category 1 candidate species, now referred to as candidate species, were those taxa for which we had on file, substantial information on biological vulnerability and threats to support a proposal to list as threatened or endangered. On October 24, 1990, we received a petition from Dr. Camm Swift, Associate Curator of Fishes at the Los Angeles Museum of Natural History, to list the tidewater goby as endangered. Our finding that the requested action may be warranted was published on March 22, 1991 (56 FR 12146). A proposal to list the tidewater goby as an endangered species was published on December 11, 1992 (57 FR 58770). On March 7, 1994, the tidewater goby was listed as a federally endangered species (59 FR 5494). At that time, we did not designate critical habitat, explaining that:

> In the case of the tidewater goby, critical habitat is not presently determinable. A final designation of critical habitat requires detailed information on the possible economic effects of such a designation. The Service does not currently have sufficient information needed to perform the economic analysis (59 FR 5495).

On September 18, 1998, the Natural Resources Defense Council, Inc., filed a lawsuit in Federal District Court in California against the United States Department of the Interior *et al.* for failure to designate critical habitat for the tidewater goby. On April 5, 1999, Judge Carlos R. Moreno ordered that the ''Service publish a proposed critical habitat designation for the tidewater goby in 120 days'' (*Natural Resources Defense Council, Inc.* v. *United States Department of the Interior et al.* CV 98–7596).

The processing of this proposed critical habitat designation does not conform with our current Listing Priority Guidance (LPG) for FY 1998/1999. That guidance gives the highest priority (Tier 1) to processing emergency rules to add species to the Lists of Endangered and Threatened Wildlife and Plants; second priority

(Tier 2) to processing final determinations on proposals to add species to the lists, processing new listing proposals, processing administrative findings on petitions (to add species to the lists, delist species, or reclassify listed species), and processing a limited number of proposed and final rules to delist or reclassify species; and third priority (Tier 3) to processing proposed and final rules designating critical habitat. Our Pacific Region is currently working on Tier 1 and 2 actions; however, we are undertaking this Tier 3 action in order to comply with the above-mentioned court order.

On June 24, 1999, we proposed, based on our re-evaluation of the species status throughout its range, to delist the northern populations of the tidewater goby, and to retain the tidewater goby populations in Orange and San Diego Counties as endangered (64 FR 33816). We determined that north of Orange County, more populations exist than were known at the time of the listing, that threats to those populations are less severe than previously believed, and that the tidewater goby has a greater ability to recolonize habitats from which it is temporarily absent than was known in 1994. We determined that the Orange and San Diego Counties populations of tidewater gobies are genetically distinct, and represent a DPS. We further determined that this DPS, comprised of gobies from only six localities, continues to be threatened by habitat loss and degradation, predation by nonnative species, and extreme weather and streamflow conditions. Therefore, we proposed that populations north of Orange County be removed from the List of Endangered and Threatened Animals, and that the southern DPS of tidewater gobies be retained as an endangered species on the list.

Other Federal involvement with the tidewater goby following the initial listing has included section 7 consultations, permitting of breaching and other activities in lagoons through the Clean Water Act, section 404 process by the U.S. Army Corps of Engineers (ACOE), and contributed funding to conduct research and surveys. Measures to reduce impacts to tidewater goby habitat and reduce or eliminate the potential for take of individuals have included adjusting the timing of projects to avoid disruption to breeding activities, the use of silt fencing to reduce sediment loads and as barricades around project sites, installing cofferdams above and below project sites, removal and translocation of animals found within the exclosures prior to necessary dewatering of project sites, minimizing project impacted area, and requiring qualified biologists to oversee all activities.

Critical Habitat

Critical habitat is defined in section 3 of the Act as—(i) the specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection and; (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. ''Conservation'' means the use of all methods and procedures that are necessary to bring an endangered species or a threatened species to the point at which listing under the Act is no longer necessary.

Because the best available information led us to conclude that the northern tidewater goby populations are no longer endangered and were thus proposed for delisting, we also have concluded that the designation of critical habitat for those Northern populations is not appropriate. We then evaluated benefits to the tidewater goby that could result from critical habitat designation in the southern portion of its range, Orange and San Diego Counties. Tidewater gobies and their habitats in Orange and San Diego Counties are described in detail in the March 7, 1994, final rule listing the species as endangered (59 FR 5494). All of the areas currently thought to be inhabited by the southern DPS of the tidewater goby are owned and controlled by the Federal government. The other areas we evaluated for possible designation are either owned and controlled by the Federal government or are non-Federal lands with a Federal nexus (by virtue of regulation under section 404 of the Clean Water Act).

The possible benefits of critical habitat designation include initiating the section 7 consultation requirement in areas currently unoccupied by the goby. Another possible benefit to the tidewater goby stemming from the designation of critical habitat is ensuring that important habitat and habitat features essential to the tidewater goby are identified for the purposes of Federal agency planning and identifying precise areas where section 7 consultation will be required for unoccupied sites.

To our knowledge, the tidewater goby is not currently threatened by take, collection, or intentional acts of vandalism, and we have no evidence that these threats would be precipitated by designating critical habitat. Thus, the apparent benefits to designating critical habitat are not counterbalanced by any risks, and we find that designating critical habitat for the tidewater goby is prudent.

Proposed Designation—Occupied Habitat

In accordance with section 3(5)(A)(i) of the Act, for habitat occupied by the species, critical habitat is defined as specific areas that contain those physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The habitat features (primary constituent elements) that provide for the physiological, behavioral, and ecological requirements essential for the conservation of the species are described at 50 CFR 424.12, and include, but are not limited to, the following:

Space for individual and population growth, and for normal behavior;

Food, water, or other nutritional or physiological requirements;

Cover or shelter;

Sites for breeding, reproduction, or rearing of offspring; and

Habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

The primary constituent habitat elements for the tidewater goby were determined from studies on their habitat requirements and population biology (Lafferty *et al.* in prep.; Manion 1993; Swensen 1994, 1995, 1998; Swift 1989) and include habitat components that are essential to the biological needs of foraging, nest construction, spawning, sheltering, and dispersal. The primary constituent elements for the tidewater goby are coastal lagoons and estuary systems supported by a natural hydrological regime and an environment free from exotic predatory fishes. These elements are discussed in detail below.

Coastal lagoons and estuaries with natural hydrology generally provide several specific habitat elements that gobies require. For instance, aquatic systems supported by a natural hydrological regime are often characterized by a combination of slightly different habitat types: freshwater creek, brackish lagoon, and coastal salt marsh. This habitat heterogeneity generally ensures that some streamflow continues and deep pockets of permanent water remain as

refugia during times of drought; provides for a variety of substrate types, of which sand and coarse silt are necessary for construction of burrows; and provides for structural complexity of the stream channel, which supports various types of aquatic and emergent vegetation. This structural complexity and presence of vegetation may ensure that all gobies are not washed out to sea during flood events (Swensen 1995). Lastly, lagoons and estuaries with a natural hydrological regime and corresponding habitat complexity generally provide for the diversity of prey species (e.g., aquatic invertebrates including aquatic insect larvae, ostracods, crustaceans, and snails) that gobies require.

The second constituent element of tidewater goby habitat is a system that is free from exotic species. Exotic fishes can devastate tidewater goby populations through competition and predation. Largemouth bass, black bass, sunfishes, stripped bass, shimofuri gobies, and yellowfin gobies have all been suspected of preying on tidewater gobies. African clawed frogs are another exotic species that have been found to prey on tidewater gobies. Keeping exotic species out of occupied goby habitats, and eliminating them from potential reestablishment sites will be crucial to the conservation of the goby.

The primary constituent elements are found in all of the six areas occupied by the tidewater goby. These areas are San Onofre Creek, Las Flores Creek, Hidden Creek, Aliso Creek, French Creek, and Cockleburr Creek, all of which are on the Marine Corps base, Camp Pendleton. In each of the areas, however, all of these habitat elements are, to varying degrees, degraded or imperiled by a combination of human-caused and natural factors (see analysis in the June 24, 1999 proposed rule to delist the northern population; 64 FR 33816), and therefore require special management considerations or protection. The six areas currently occupied by the proposed southern DPS of the tidewater goby are proposed for designation as critical habitat.

Proposed Designation—Unoccupied Habitat

In accordance with section 3(5)(A)(i) of the Act, areas outside the geographical area occupied by the species may meet the definition of critical habitat upon determination that they are essential for the conservation of the species. We identified the unoccupied lagoons and estuaries where gobies occurred in the past and evaluated those that might be essential to the conservation of the species. The proposed southern DPS of the tidewater goby is in danger of becoming extinct because of habitat conversion over the last few decades (i.e., altered hydrology), which has resulted in habitat loss and local extinctions. The six remaining occupied habitat areas, discussed above, represent a remnant of the former range that once extended from Aliso Creek, Orange County in the north to Agua Hedionda Lagoon, San Diego County in the south. Even the remaining populations are threatened by human-caused habitat alteration, predation by non-native species, and occasional extreme streamflow conditions (see analysis in 64 FR 33816). Because of these threats, the recent proposal to delist the tidewater goby over much of its range retained the endangered status of the southern DPS.

The long-term survival of tidewater gobies in Orange and San Diego Counties depends upon the presence of enough habitat areas to support the natural pattern of local extinctions and recolonizations (Swift 1989, Lafferty *et al.* in prep.) that characterize its population biology. The removal of threats and the colonization of gobies to additional areas that are currently unoccupied will be necessary.

To determine which unoccupied areas are essential and should be designated as critical habitat, we evaluated which unoccupied areas could provide the primary constituent elements and support tidewater gobies in the future, and, by virtue of their geographical distribution, provide for a network of habitat areas supporting gobies and acting as sources of recolonization for other nearby habitat areas. The essential unoccupied areas that are restorable, or contain restorable areas, and are most likely to promote recolonization of adjacent habitat areas, are Aliso Creek, Orange County, and four estuaries in San Diego County: San Mateo Creek, the Santa Margarita River, Buena Vista Lagoon, and Agua Hedionda Lagoon. These areas are proposed as critical habitat for the tidewater goby.

Proposed Critical Habitat Designation

At this time, the proposed critical habitat areas discussed below constitute our best evaluation of areas needed for the conservation of the tidewater goby. We used the best scientific information available, and took into consideration the proposal to delist the northern populations of the species. We emphasized areas that are essential to the conservation of this species because they provide for the demographic interchange necessary to maintain the viability of the southern DPS. Proposed critical habitat may be revised should new information become available prior to the final rule, and existing critical habitat may be revised if new information becomes available after the final rule.

The following general areas are proposed as critical habitat (see legal descriptions for exact habitat boundaries):

1. Aliso Creek (Orange County) and its associated lagoon and marsh from the Pacific Ocean to approximately 1.0 km (0.6 mi) upstream;
2. San Mateo Creek, its associated lagoon and marsh, from the Pacific Ocean to approximately 1.3 km (0.9 mi) upstream;
3. San Onofre Creek, its associated lagoon and marsh, from the Pacific Ocean to approximately 0.6 km (0.4 mi) upstream;
4. approximately 1.0 km (0.6 mi) of Las Flores Creek, and its associated lagoon and marsh, from the Pacific Ocean to Interstate 5;
5. approximately 0.8 km (0.5 mi) of Hidden Creek, and its associated lagoon and marsh, from the Pacific Ocean to Interstate 5;
6. approximately 0.7 km (0.4 mi) of Aliso Creek and its associated lagoon and marsh, from the Pacific Ocean to Interstate 5;
7. approximately 0.7 km (0.4 mi) of French Creek, and its associated lagoon and marsh, from the Pacific Ocean to Interstate 5;
8. approximately 1.0 km (0.6 mi) of Cockleburr Creek and its associated lagoon and marsh, from the Pacific Ocean to Interstate 5;
9. the Santa Margarita River, from the Pacific Ocean to a point approximately 5.0 km (3.1 mi) upstream;
10. Buena Vista Lagoon, its associated marsh and creek, from the Pacific Ocean to a point approximately 3.4 km (2.1 mi) upstream; and
11. Agua Hedionda Lagoon, its associated marsh and creek, from the Pacific Ocean to a point approximately 3.7 km 92.3 mi) upstream.

Each area includes the current 50-year flood plain.

Although the majority of land being proposed for designation is under Federal administration and management, some estuary and riparian systems are on State, county, city, and private lands. The Aliso Creek segment, Orange County, is owned by the County of Orange, the City of South Laguna, and private interests. Buena Vista Lagoon is owned by the California Department of Fish and Game, the City of Carlsbad, and the City of Oceanside. Agua Hedionda Lagoon is owned by the San Diego Gas and Electric Company, which leases to the City of Carlsbad, and

public and private interests. The segments on San Mateo Creek, San Onofre Creek, Las Flores Creek, Hidden Creek, Aliso Creek, French Creek, Cockleburr Creek, and the Santa Margarita River are owned by the Marine Corps base, Camp Pendleton. Many activities carried out on private, Tribal, State, and Federal lands have Federal involvement, and would be subject to section 7. However, on private lands where no Federal involvement exists, a critical habitat designation has no regulatory impact.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against certain activities involving listed species are discussed, in part, below.

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is designated or proposed. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed or critical habitat is designated, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with us.

Section 7(a)(4) of the Act and regulations at 50 CFR 402.10 require Federal agencies to confer with us on any action that is likely to result in destruction or adverse modification of proposed critical habitat. Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where critical habitat is subsequently designated. Consequently, some Federal agencies may request conferencing with us on actions for which formal consultation has been completed. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory.

We may issue a formal conference report if requested by a Federal agency. Formal conference reports on proposed critical habitat contain a biological opinion that is prepared according to 50 CFR 402.14, as if critical habitat were designated. We may adopt the formal conference report as the biological opinion when the critical habitat is designated, if no significant new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). We may also prepare a formal conference report to address the effects on proposed critical habitat from issuance of an incidental take permit, under section 10(a)(1)(B) of the Act.

Activities on Federal lands that may affect the tidewater goby or its critical habitat will continue to require section 7 consultation. Activities on private or State lands requiring a permit from a Federal agency, such as a permit from the ACOE under section 404 of the Clean Water Act, will also continue to be subject to the section 7 consultation process. Federal actions not affecting the species, as well as actions on non-Federal lands that are not federally funded or permitted do not require section 7 consultation.

Section 4(b)(8) of the Act requires us to describe in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may adversely modify such habitat or that may be affected by such designation. Activities that may destroy or adversely modify critical habitat include those that alter the primary constituent elements to an extent that the value of critical habitat for both the survival and recovery of the tidewater goby is appreciably reduced. We note that such activities may also jeopardize the continued existence of the species. Activities that, when carried out, funded, or authorized by a Federal agency, may destroy or adversely modify critical habitat include, but are not limited to:

(1) Activities such as water diversion or impoundment, groundwater pumping, artificial lagoon breaching to protect urban or agricultural areas from inundation, or any other activity that alters water quality or quantity to an extent that water quality becomes unsuitable to support gobies, or any activity that significantly affects the natural hydrologic function of the lagoon system;

(2) Activities such as coastal development, sand and gravel mining, channelization, dredging, impoundment, or construction of flood control structures, that alter watershed characteristics or appreciably alter stream channel and or lagoon morphology; and

(3) Activities which could lead to the introduction of exotic species, especially exotic fishes, into occupied or potential goby habitat.

If you have questions regarding whether specific activities will constitute adverse modification of critical habitat, contact the Field Supervisor, Carlsbad Ecological Services Field Office (see **ADDRESSES** section). Requests for copies of the regulations on listed wildlife and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Branch of Endangered Species, 911 N.E. 11th Ave, Portland, OR 97232 (telephone 503–231–2063, facsimile 503–231–6243).

Designation of critical habitat could affect Federal agency activities. Federal agencies already consult with us on activities in areas currently occupied by the species to ensure that their actions do not jeopardize the continued existence of the species. These actions include, but are not limited to:

(1) Regulation of activities affecting waters of the ACOE under section 404 of the Clean Water Act;

(2) Regulation of water flows, damming, diversion, and channelization by Federal agencies;

(3) Road construction, right of way designation, or regulation of agricultural activities by Federal agencies; and

(4) Some military maneuvers on the Marine Corps base, Camp Pendleton.

Economic Analysis

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial information available and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species. We will conduct an analysis of the economic impacts of designating these areas as critical habitat prior to a final determination. When completed,

we will announce the availability of the draft economic analysis with a notice in the **Federal Register**, and we will open a 30-day comment period at that time.

Public Comments Solicited

It is our intent that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, we solicit comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act, including whether the benefits of designation will outweigh any threats to the species due to designation;

(2) Specific information on the amount and distribution of tidewater goby habitat, and what habitat is essential to the conservation of the species and why;

(3) Land use practices and current or planned activities in the subject areas and their possible impacts on proposed critical habitat;

(4) Any foreseeable economic or other impacts resulting from the proposed designation of critical habitat, in particular, any impacts on small entities or families; and,

(5) Economic and other values associated with designating critical habitat for the tidewater goby, such as those derived from non-consumptive uses (e.g., hiking, camping, bird-watching, enhanced watershed protection, improved air quality, increased soil retention, ''existence values,'' and reductions in administrative costs).

In accordance with our policy published on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of such review is to ensure listing decisions are based on scientifically sound data, assumptions, and analyses. We will send these peer reviewers copies of this proposed rule immediately following publication in the **Federal Register**. We will invite these peer reviewers to comment, during the public comment period, on the specific assumptions and conclusions regarding the proposed designation of critical habitat.

We will consider all comments and information received during the 60-day comment period on this proposed rule during preparation of a final rulemaking. Accordingly, the final decision may differ from this proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Requests for public hearings must be made at least 15 days prior to the close of the public comment period. We will schedule public hearings on this proposal if any are requested, and announce the dates, times, and places of those hearings in the **Federal Register** and local newspapers at least 15 days prior to the first hearing.

Clarity of the Rule

Executive Order 12866 requires each agency to write regulations/notices that are easy to understand. We invite your comments on how to make this notice easier to understand including answers to questions such as the following: (1) Are the requirements in the notice clearly stated? (2) Does the notice contain technical language or jargon that interferes with the clarity? (3) Does the format of the notice (grouping and order of sections, use of headings, paragraphing, etc.) aid or reduce its clarity? (4) Is the description of the notice in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the notice? What else could we do to make the notice easier to understand?

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, this action has been submitted for review by the Office of Management and Budget. A 60-day comment period is opened with the publication of this rule. Following issuance of this proposed rule, we will prepare an economic analysis to determine the economic consequences of designating the proposed areas as critical habitat. If our economic analysis reveals that the economic impacts of designating any area as critical habitat outweigh the benefits of designation, we will exclude those areas from consideration, unless such exclusion will result in the extinction of the species. In the economic analysis, we will address any possible inconsistencies with other agencies' actions and any effects on entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. This proposed rule does not raise novel legal or policy issues.

Other Rulemaking Determinations

In the economic analysis, we will determine the economic and other impacts of the proposed critical habitat designation in compliance with:

1. Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*)
2. Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2))
3. Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*)
4. Taking Personal Property Rights (Executive Order 12630)
5. Federalism (Executive Order 12612)

Civil Justice Reform

In accordance with Executive Order 12988, the Service has determined that this proposed rule is consistent with sections 3(a) and 3(b)(2) of the Order. The proposed rule and final rule will be reviewed by the Department of the Interior Solicitor's Office. We will make every effort to ensure that the final determination contains no drafting errors, provides clear standards, simplifies procedures, reduces burden, and is clearly written such that litigation risk is minimized.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any information collection requirements for which the Office of Management and Budget approval under the Paperwork Reduction Act is required.

National Environmental Policy Act

We have determined that an Environmental Assessment and/or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 need not be prepared in connection with regulations adopted pursuant to section 4(a) of the ESA. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244). This rule does not constitute a major federal action significantly affecting the quality of the human environment.

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951) and 512 DM 2: We understand that recognized Federal Tribes must be related to on a Government-to-Government basis. The 1997 Secretarial Order on Native Americans and the Endangered Species Act clearly states that Tribal lands should not be designated unless absolutely necessary for the conservation of the species. According to the Secretarial Order, ''Critical habitat

shall not be designated in an area that may impact Tribal trust resources unless it is determined essential to conserve a listed species. In designating critical habitat, the Services shall evaluate and document the extent to which the conservation needs of a listed species can be achieved by limiting the designation to other lands.'' The proposed designation of critical habitat for the tidewater goby does not contain any Tribal lands or lands that we have identified as impacting Tribal trust resources.

References Cited

A complete list of all references cited in this proposed rule is available upon request from the Carlsbad Fish and Wildlife Office (see **ADDRESSES** section).

Author. The primary author of this notice is Glen Knowles (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

For the reasons given in the preamble, we propose to amend 50 CFR part 17 as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.11(h), revise the entry for ''goby, tidewater'' under ''FISHES'' to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
FISHES							
*	*	*	*	*	*		*
Goby, tidewater	*Eucyclogobius newberryi.*	U.S.A. (CA)	do	E	527	17.95(e)	NA
*	*	*	*	*	*		*

3. In § 17.95 add critical habitat for the tidewater goby (*Eucyclogobius newberrii*) under paragraph (e) in the same alphabetical order as this species occurs in § 17.11(h), to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(e) Fishes.

* * * * *

Tidewater goby (*Eucyclogobius newberrii*)

1. Critical habitat units are depicted for Orange and San Diego Counties, California, on the maps below.

2. Critical habitat includes the sections of streams indicated on the maps below and their 50 year flood plain, including associated lagoons and marsh.

3. Within these areas, the primary constituent elements include, but are not limited to, those habitat components that are essential for the primary biological needs of foraging, sheltering, and reproduction. These elements include the following: (1) Coastal lagoons and estuary systems supported by a natural hydrological regime, which results in sufficient streamflow, deep pockets of permanent water, sand and coarse silt substrate, a variety of aquatic and emergent vegetation, and a diversity of prey species; and (2) an environment free from exotic fishes.

Map Unit 1: Orange County, California. From USGS 7.5′ quadrangle map Laguna Beach, California, and San Juan Capistrano, California. San Bernardino Principal Meridian, California, T. 7 S., R 8 W., beginning at a point on Aliso Creek in SW sec. 32 and at approximately 33°30′46″ N latitude and 117°44′37″ W longitude and proceeding downstream (westerly) to the Pacific Ocean covering approximately 1.0 km (0.6 mi.), including the stream, its 50 year flood plain, associated lagoons and marsh.

Map Unit 2: San Diego County, California. From USGS 7.5′ quadrangle map San Clemente, California. San Bernardino Principal Meridian, California, T. 9 S., R. 7 W., beginning at a point on San Mateo Creek in NW sec. 14 and at approximately 33°23′46″ N latitude and 117°35′20″ W longitude and proceeding downstream (southerly) to the Pacific Ocean covering approximately 1.3 km (0.9 mi.), including the stream, its 50 year flood plain, and associated lagoons and marsh.

Map Unit 3: San Diego County, California. From USGS 7.5′ quadrangle map San Clemente, California. San Bernardino Principal Meridian, California, T. 9 S., R. 7 W., beginning at a point on San Onofre Creek in SE sec. 14 and at approximately 33°23′05″ N latitude and 117°34′30″ W longitude and proceeding downstream (southwesterly) to the Pacific Ocean covering approximately 0.6 km (0.4 mi.), including the stream, its 50 year flood plain, and associated lagoons and marsh.

Map Unit 4: San Diego County, California. From USGS 7.5′ quadrangle map Las Pulgas Canyon, California. San Bernardino Principal Meridian, California, T. 10 S., R. 6 W., beginning at a point on Las Flores Creek in the middle of sec. 13 and at approximately 33°17′32″ N latitude and 117°27′20″ W longitude and proceeding downstream (westerly) to the Pacific Ocean covering approximately 0.8 km (0.5 mi.), including the stream, its 50 year flood plain, and associated lagoons and marsh.

Map Unit 5: San Diego County, California. From USGS 7.5′ quadrangle map Las Pulgas Canyon, California. San Bernardino Principal Meridian, California, T. 10 S., R. 5 W., beginning at a point on Hidden Creek in W sec. 30 and at approximately 33°16′46″ N latitude and 117°26′48″ W longitude and proceeding downstream (southwesterly) to the Pacific Ocean covering approximately 0.8 km (0.5 mi.), including the stream, its 50 year flood plain, and associated lagoons and marsh.

Map Unit 6: San Diego County, California. From USGS 7.5′ quadrangle map Las Pulgas Canyon, California. San Bernardino Principal Meridian, California, T. 10 S., R. 5 W., beginning at a point on Aliso Creek in NE sec. 31

and at approximately 33°16′13″ N latitude and 117°26′19″ W longitude and proceeding downstream (southwesterly) to the Pacific Ocean covering approximately 0.7 km (0.4 mi.), including the stream, its 50 year flood plain, and associated lagoons and marsh.

Map Unit 7: San Diego County, California. From USGS 7.5′ quadrangle map Las Pulgas Canyon, California. San Bernardino Principal Meridian, California, T. 10 S., R. 5 W., beginning at a point on French Creek in E sec. 31 and at approximately 33°16′01″ N latitude and 117°26′01″ W longitude and proceeding downstream (westerly) to the Pacific Ocean covering approximately 0.7 km (0.4 mi.), including the stream, its 50 year flood plain, and associated lagoons and marsh.

Map Unit 8: San Diego County, California. From USGS 7.5′ quadrangle map Las Pulgas Canyon, California. San Bernardino Principal Meridian, California, T. 11 S., R. 5 W., beginning at a point on Cockleburr Creek in NE sec. 5 and at approximately 33°15′16″ N latitude and 117°25′21″ W longitude and proceeding downstream (westerly) to the Pacific Ocean covering approximately 1.0 km (0.6 mi.), including the stream, its 50 year flood plain, and associated lagoons and marsh.

Map Unit 9: San Diego County, California. From USGS 7.5′ quadrangle map Oceanside, California. San Bernardino Principal Meridian, California, T. 11 S., R. 5 W., beginning at a point on the Santa Margarita River in NW sec. 2 and at approximately 33°15′08″ N latitude and 117°22′38″ W longitude and proceeding downstream (westerly) to the Pacific Ocean covering approximately 5.0 km (3.1 mi.), including the river's 50 year flood plain, associated lagoons and marsh.

Map Unit 10: San Diego County, California. From USGS 7.5′ quadrangle map San Luis Rey, California. San Bernardino Principal Meridian, California, T. 11 S., R. 4 W., beginning at a point on Buena Vista Creek at the border of sec. 31 and 32 and at approximately 33°10′48″ N latitude and 117°19′49″ W longitude and proceeding downstream (southwesterly) to the Pacific Ocean covering approximately 3.4 km (2.1 mi.), including Buena Vista Creek, its 50 year flood plain, Buena Vista Lagoon, and associated marsh.

Map Unit 11: San Diego County, California. From USGS 7.5′ quadrangle map San Luis Rey, California. San Bernardino Principal Meridian, California, T. 12 S., R. 4 W., beginning at a point on Augua Hedionda Creek in the middle of Section 9 and at approximately 33°08′44″ N latitude and 117°18′19″ W longitude and proceeding downstream (southwesterly) to the Pacific Ocean covering approximately 3.7 km (2.3 mi.), including the creek, its 50 year flood plain, Agua Hedionda Lagoon, and associated marsh.

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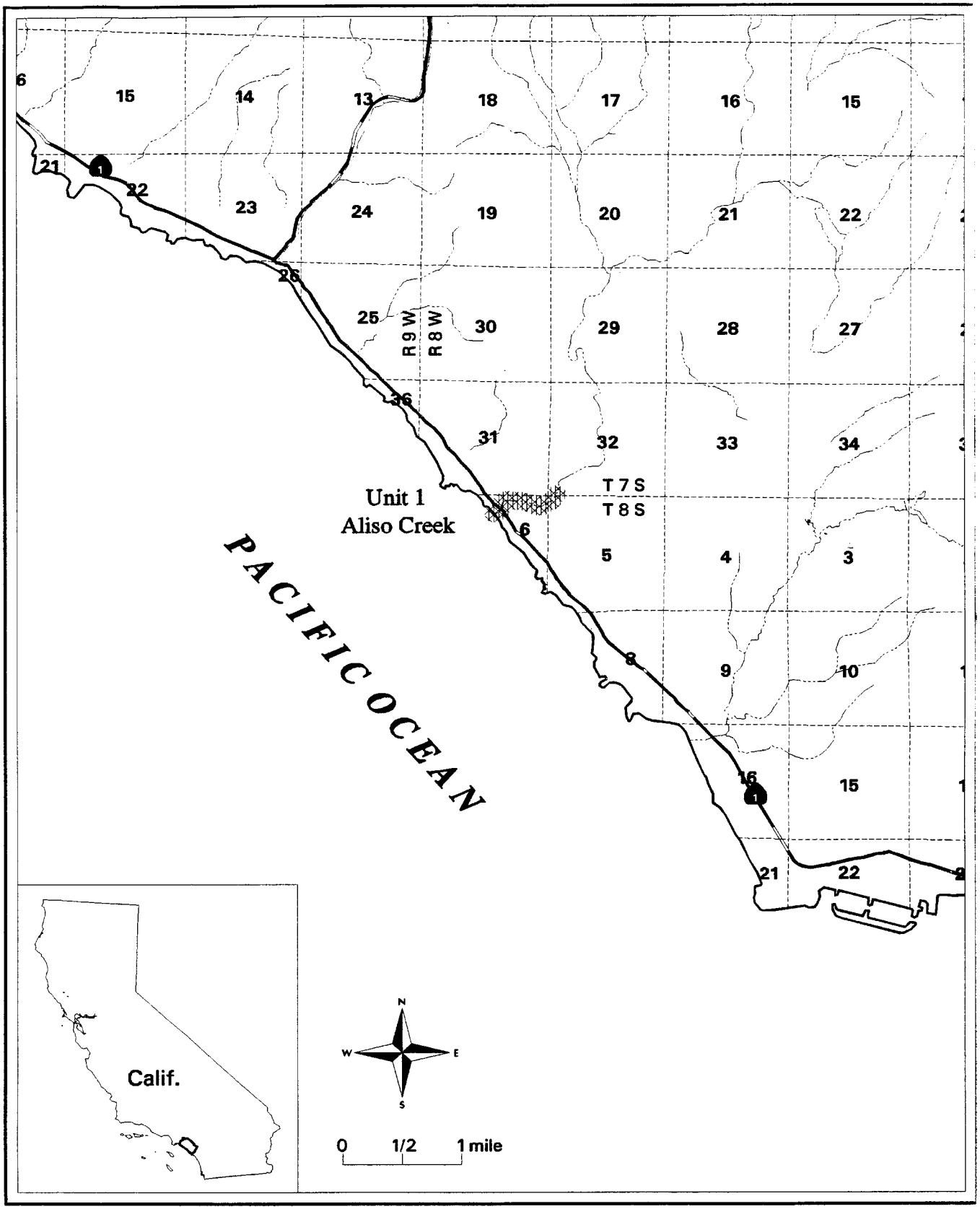
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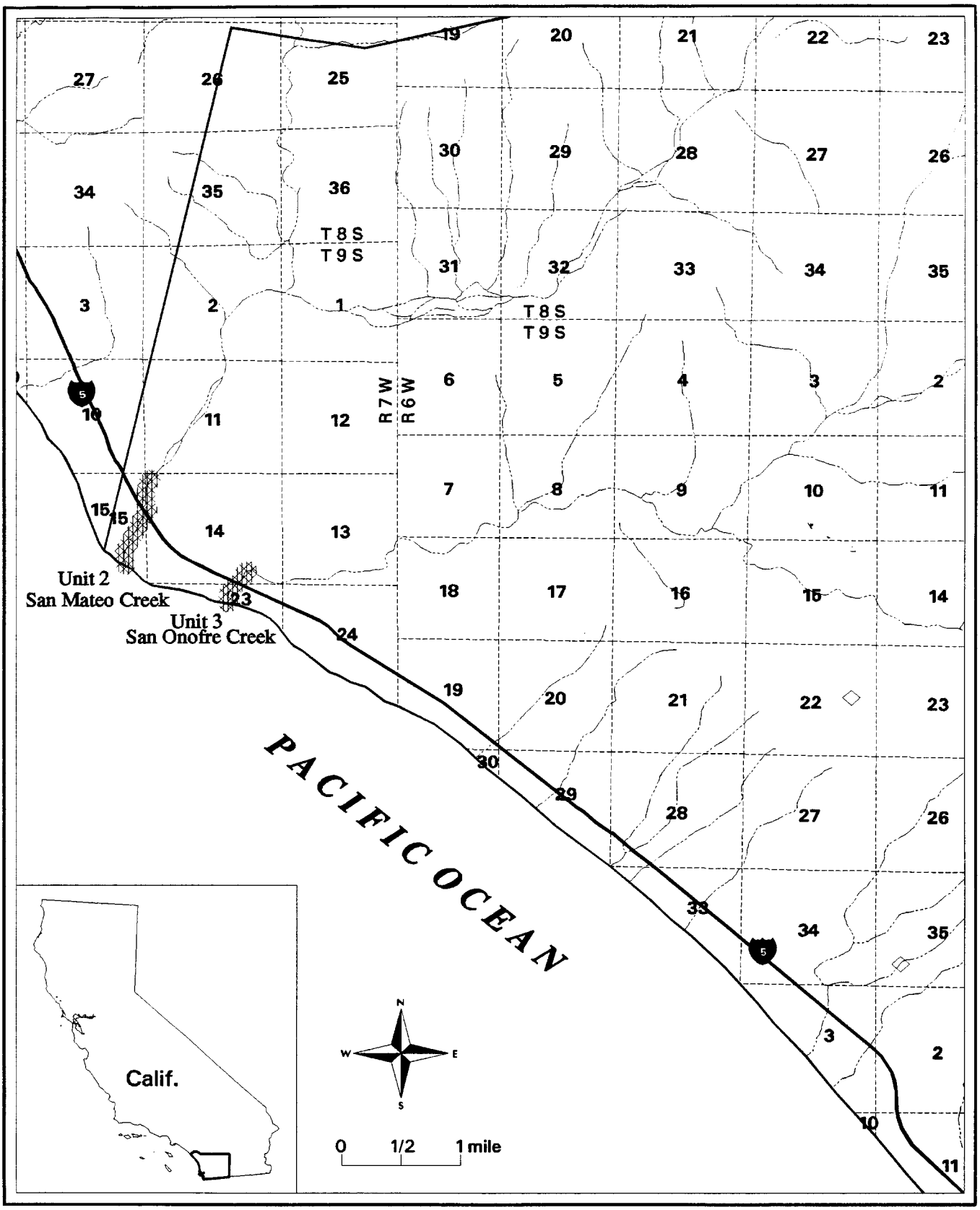
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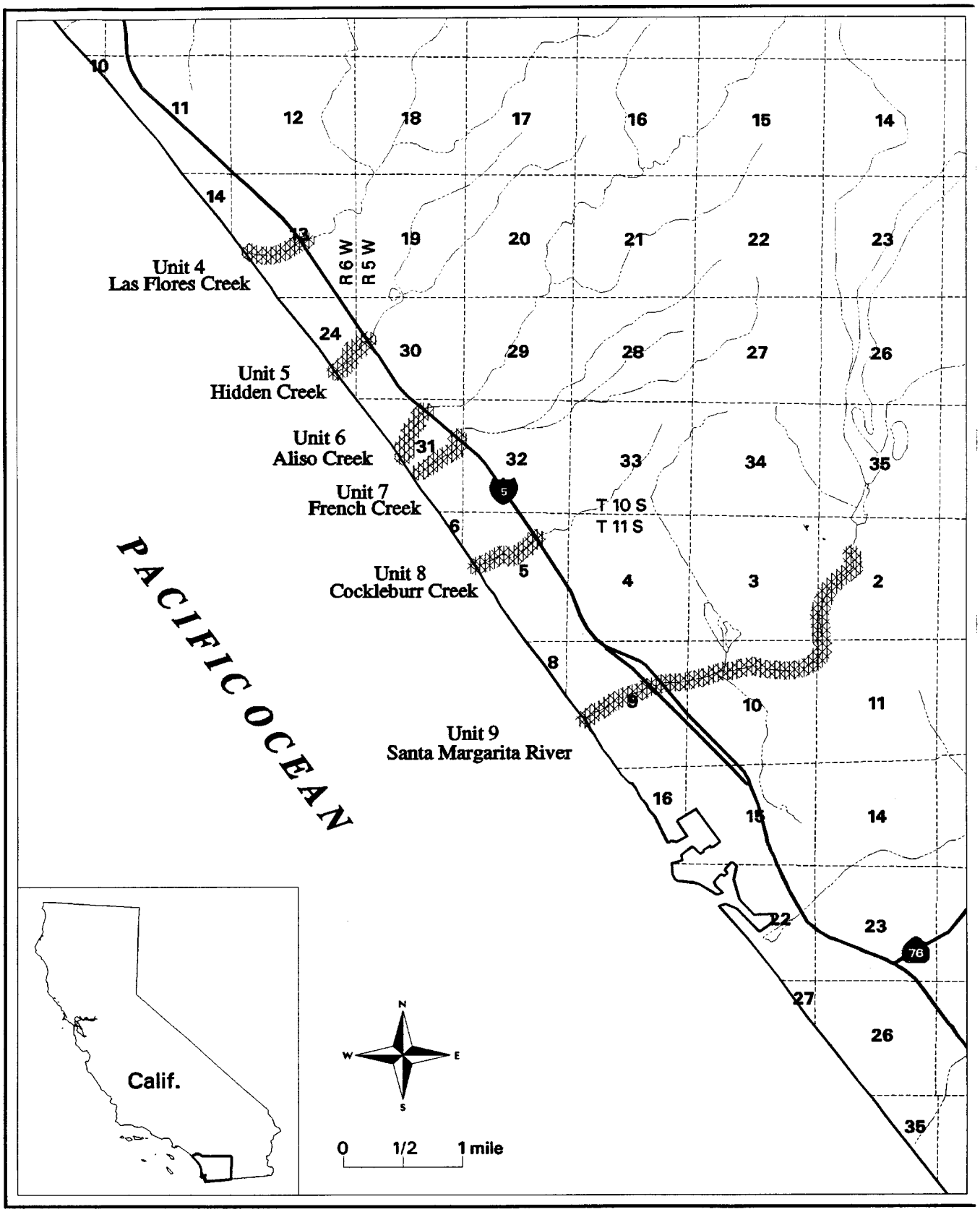
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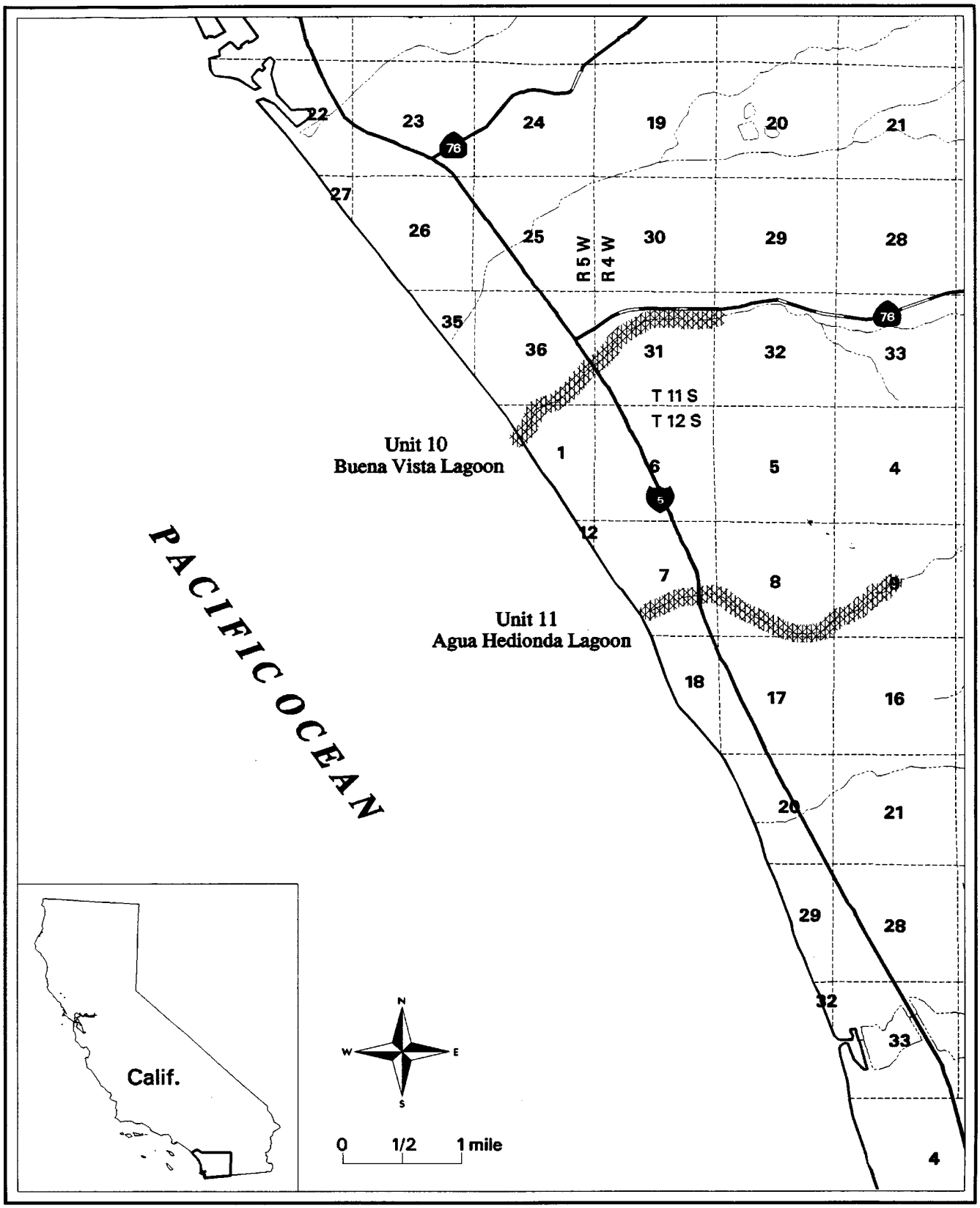
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Dated: July 29, 1999.

Stephen C. Saunders,

Acting Assistant Secretary for Fish Wildlife and Parks.

[FR Doc. 99–20034 Filed 7–30–99; 2:55 pm]

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