

IV. Priority Development

Several sections of the Coastal Act<sup>4</sup> mandate that certain types of development, such as lower-cost visitor and recreation facilities, coastal agriculture, upland coastal recreation, coastal-dependent facilities, and others, receive priority over other types.

**Analysis:** The Coastal Act's identification of the types of development to prioritize in the coastal zone raises at least three distinct issues related to whether a water supply is public or private:

- First, whether non-priority development that includes its own water supply might be able to proceed at the expense of priority development that may not be able to provide its own supply;
- Second, whether locating a desalination facility in a coastal area might preclude or adversely affect the use of the site or adjacent sites by priority uses; and,
- Third, whether a private desalination facility would allocate water in a manner reflecting the same priorities as a public facility.

Regarding the first issue, the types of development prioritized in the Coastal Act do not necessary come with their own water supply. In areas where development is limited by the available water, private facilities that provide their own water might be able to proceed while other higher priority developments that do not have the ability to provide their own water might not. A private, non-priority development could therefore override Coastal Act preferences for priority coastal uses or might not be subject to water allocation decisions made by a local public water purveyor. Because desalination remains a relatively costly process, a development's ability to provide its own desalinated water may be largely based on financial considerations rather than whether the proposed development is recognized as a priority development for coastal areas. A lower-cost visitor and recreation facility, for instance, may not be able to compete with the ability of a higher-cost facility to provide its own water, and so a coastal site suitable for either type of development may end up used by the latter at the expense of the former. One other consequence of this issue could show up during difficult financial times, in that a private development dependent on its own water supply may, for various reasons, no longer be able to afford the costs of desalination and instead increase the burden on the local public water purveyor. This additional burden could further limit the ability of public agencies to allocate water or land to priority coastal uses. [This issue is also discussed later in Section VI

- <sup>4</sup> These sections include:
- Section 30213 – lower-cost visitor and recreation facilities.
  - Section 30222 – visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation. This section also prioritizes those facilities over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.
  - Section 30222.5 – aquaculture facilities.
  - Section 30223 – upland areas for coastal recreation.
  - Section 30224 – recreational boating and associated facilities.
  - Section 30241 – commercial fishing and recreational boating facilities.
  - Section 30241 – prime agricultural land.
  - Section 30255 – coastal-dependent development.
  - Section 30254 – priority developments must not be precluded by other development due to the limited capacity of public works facilities.

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of this briefing.] A similar resource-allocation issue may arise due to the relatively high electrical demand associated with desalination, in that the demand from a desalination facility used by a non-priority development could limit or preclude the ability of local electrical supplies to support priority developments.

Regarding the second issue, a desalination facility located on or adjacent to coastal sites suitable for higher-priority developments could remove or reduce land available for such developments. Desalination facilities may result in several types of adverse effects on coastal resources – visual, noise, public access, water quality, etc. – any of which, even if mitigated, could reduce the ability of priority developments to be sited nearby. This would in turn diminish the coastal uses associated with these priority developments, and may therefore be inconsistent with Coastal Act goals. As an example, in Consistency Determination #CD-16-94 (U.S. Army, Fort Ord), the Commission determined that a desalination facility being considered in the coastal zone near the cities of Marina and Seaside would diminish public access and recreational opportunities in that area, and further concluded that a feasible, less environmentally damaging alternative site was available east of Highway 1 away from the shoreline area.

Regarding the third issue, public ownership and oversight of desalination facilities, especially in areas with certified LCPs, is more likely to ensure that water allocations will occur in a manner consistent with the priority developments identified in the Coastal Act and in the LCP. Allocations from public facilities are likely to be subject to more ongoing public review, whereas allocations from private facilities may be primarily market driven and might not adequately reflect Coastal Act priorities. This difference in how public or private entities might allocate water is likely to be moderated in areas where the state Public Utility Commission has provided exclusive retail rights to a municipal water district. In these areas, a private desalination facility would be able to act only as a water wholesaler and sell only to the water district where the allocation decisions would be made.

V. Projects Involving Fill in Coastal Waters

Section 30233(a) states:

*The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be done in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*

- (1) *New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
- (2) *Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
- (3) *In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is*

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*restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.*

- (4) *In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
- (5) *Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
- (6) *Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
- (7) *Restoration purposes.*
- (8) *Nature study, aquaculture, or similar resource dependent activities.*

**Analysis:** Section 30233(a) of the Coastal Act applies to proposed projects involving diking, dredging, or filling in coastal waters, and contains strict limits on desalination facilities, public or private, that would require new in-water structures. This section identifies eight types of development under which fill may be permitted. Of these eight, coastal desalination facilities are likely to fall under, at most, two of these types – coastal-dependent industrial facilities, or incidental public service purposes. Some desalination facilities may fall under neither.

**Fill for coastal-dependent industrial facilities:** Regarding the first of these two types, desalination, as stated in the previous section, is not in and of itself a coastal-dependent use. Again, this will require case-by-case review and may depend, in part, on the different opportunities that may be available to public or private entities as described above.

**Fill for incidental public purposes:** The type of allowable fill makes a clear distinction between public and private purposes. By definition, a public facility is likely to include a greater presumption that it is for a public purpose than is a private facility. This Coastal Act provision further defines the type of fill allowed as an incidental public purpose as "...including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines". The element common to these examples, and the interpretation provided by past Commission findings, is that this type of fill involves only temporary impacts. For instance, the impacts associated with burying a cable or pipe are generally limited to the immediate effects associated with construction, such as turbidity, short-term disturbance to marine organisms, and the like. The type of fill allowed under this provision does not include new open intakes and outfalls (unless they are considered coastal-dependent and therefore allowable under the other fill provision), and does not provide for the types of ongoing adverse environmental effects associated with such structures, such as entrainment of marine organisms, discharges of various contaminants or increased brine concentrations, or other similar impacts. This interpretation is strengthened by the policy specifically mentioning maintenance of existing intakes and outfalls, which presumably have impacts considered part of a site's baseline conditions, versus constructing new intakes or outfalls, which would result in new and ongoing impacts.

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VI. Capacity of Public Works Facilities

Section 30254 states:

*New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.*

**Analysis:** This section of the Act ties development to the capabilities of public works facilities. Such facilities are protected from failure, bankruptcy, or other economic difficulties differently than are private facilities. If a private desalination facility ceases operations, the burden of supporting the developments using water from that facility may suddenly shift to a nearby public water supply. This public system may not have the capacity to serve these developments, and perhaps more importantly for purposes of the Coastal Act, the capacity that may be diverted to users previously supplied by a private facility may limit the ability of the public system to provide for the priority developments discussed in a previous section above.

VII. The Public Trust Doctrine

The Public Trust Doctrine is a long-held legal construct of American property law. The doctrine as applied in the U.S. is an expanded version of the form contained in English Common Law dating from the era of the Magna Carta in the 13<sup>th</sup> Century.

The essence of the Public Trust Doctrine is that the public has the right to use and enjoy lands underlying navigable waterbodies. Its most common uses have been to ensure the public has access to navigable waters and tidelands for navigation, commerce, fishing, and shellfish harvest. The flexibility inherent in the doctrine has resulted in each state applying it differently. In California, the doctrine is invoked in portions of the state Constitution<sup>5</sup>. California courts have recognized it as being sufficiently flexible to encompass changing public needs, and over time have determined the doctrine applies to not only to the land underlying the water but also to the

<sup>5</sup> California Constitution, Article 1, Section 25: "The people shall have the right to fish upon and from the public lands of the State and in the waters thereof, excepting upon lands set aside for fish hatcheries, and no land owned by the State shall ever be sold or transferred without reserving in the people the absolute right to fish thereupon; and no law shall ever be passed making it a crime for the people to enter upon the public lands within this State for the purpose of fishing in any water containing fish that have been planted therein by the State; provided, that the legislature may by statute, provide for the season when and the conditions under which the different species of fish may be taken."

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water itself<sup>6</sup>, and applies not only to navigation and commerce but also to water quality<sup>7</sup>. Courts in this state have also recognized that the doctrine allows the public to use navigable waters for "...boating, swimming, fishing, hunting, and all recreational purposes"<sup>8</sup>. "preservation"<sup>9</sup>, and other "ecological and aesthetic values"<sup>10</sup>. While private uses are allowed, they are generally limited to those that would not harm public trust values, including the uses identified above.

Review of proposed coastal desalination facilities using seawater from either the open ocean or estuaries may need to include evaluations as to whether the proposal will fully support these public trust values. Some of these evaluations may be already included in other elements of the review – for example, determining whether the volume and rate of a facility's intake and discharge adversely affects marine organisms is generally done as part of review for conformity to the Coastal Act's policies on marine biological resources – however, the review may also need to determine whether other "ecological and aesthetic values" incorporated into the Public Trust Doctrine are supported.

Importantly, approval of a private desalination facility would result in the use of a public trust resource for private benefit. To ensure the Public Trust Doctrine is supported, project review should evaluate whether the proposed use for private benefit would allow continuation of the other public uses.

CONCLUSION

This briefing has provided only a conceptual level review of how various Coastal Act policies are likely to apply differently to public or private desalination proposals. Given the complexities of the issue and site-specific characteristics, each proposal will require case-by-case review to determine whether and how each of these policies applies.

<sup>6</sup> National Audubon Society v. Superior Court, (1983) 33 Cal.3d 419

<sup>7</sup> People v. Gold Run Ditch and Mining Co. (1884) 66 Cal. 138

<sup>8</sup> People v. Mack, 19 Cal. App. 3d 1040, 1045, 97 Cal. Rptr. 448 (1971)

<sup>9</sup> Marks v. Whitney, 6 Cal.3d 251, 259, 491 p.2d 374, 98 Cal. Rptr. 790 (1971) – "[O]ne of the most important public uses of the tidelands... is the preservation of these lands in their natural state..."

<sup>10</sup> National Audubon Society v. Superior Ct., 33 Cal.3d 419, 435, 658 p.2d 709, 189 Cal. Rptr. 49 (1983) – "The principle values the plaintiff seeks to protect, however, are recreational and ecological – the scenic views of the lake and its shore, the purity of the air, and the use of the lake for the nesting and feeding by birds. Under Marks v. Whitney, 6 Cal. 3d 251 (491 P.2d 374, 98 Cal. Rptr. 790) (1971), it is clear that protection of these things is among the purposes of the public trust." Also City of Berkeley v. Superior Court, 26 Cal.3d 515, 521, 606 P.2d 362, 162 Cal. Rptr. 327 (1980) – "Although early cases expressed the scope of the public's rights in tidelands as encompassing navigation, commerce and fishing, the permissible range of public uses is far broader, including the right to ...preserve the tidelands in their natural state as ecological units for scientific study."

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BIBLIOGRAPHY

Anderson, Richard F., PhD, and Paulo Heyman. Public/Private Partnerships in Municipal Water and Wastewater Systems: Case Studies of Selected Cities. The United States Conference of Mayors Urban Water Council, Washington, D.C. February 2000.

The California Water Plan Update, Bulletin 160-98, Appendix 4-A Urban and Agricultural Water Pricing.

Public Citizen, California Water: A Primer, from *Public Citizen's Critical Mass Energy and Environmental Program*, n.d.

Slade, David C., Esq., R. Kerry Kehoe, Esq., and Jane K. Stahl, Esq. Putting the Public Trust Doctrine to Work: The Application of the Public Trust Doctrine To the Management of Lands, Waters, and Living Resources of the Coastal States, 2<sup>nd</sup> Edition. Coastal States Organization, Inc., Washington, D.C. June 1997.

Sommariva, Corrado and Simon Harrison. Risks and opportunities in private desalination projects, from *Global Water Intelligence*, p. 14-15. May 2002.

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EXISTING DESALINATION FACILITIES ALONG THE CALIFORNIA COAST									
Operator / Location:	Public/ Private:	Purpose:	Maximum Capacity:	Source Water:	Discharge:	Status:			
Resources / Encina Sand City	Public	Domestic	450,000 gpd, 20 AF/yr.	Ocean	Pipeline to ocean	Planning			
Sterling Hotel / Sand City	Private	Private development	3-14 mgd	Ocean	Pipeline to ocean	Planning			
Sanita Cruz County Sanitation District	Public	Domestic	700,000 gpd	Not known	Not known	Not known			
Carmel Area Wastewater District	Public	Power plant	Not known	Not known	Not known	Inactive			
U.S. Navy, North Island Naval Air Station / San Diego	Public	Domestic	Not known	Not known	Not known	Not known			
Orange County Metropolitan Water District / Dana Point	Public	Domestic	27 mgd, 30,240 AF/yr.	Seawater wells	Injection well	Planning			
East-West Ranch / Cambria	Private	Domestic	Not known	Not known	Not known	Withdrawn			
Fort Ord State Park / Monterey County	Public	Domestic	50 mgd, 56,000 AF/yr.	Not known	Not known	Not known			
Metropolitan Water District of Southern California	Private	Domestic	5 mgd, 5600 AF/yr.	Ocean	Not known	Not known			
Monterey Bay Aquarium	Private	Aquarium visitor use	40,000 gpd, 45 AF/yr.	Ocean	Combined w/other seawater discharges	Active			
PG&E, Diablo Canyon / San Luis Obispo County	Private	Power plant	576,000 gpd, 645 AF/yr.	Ocean	Blend w/cooling water	Not known			
San Simeon / San Luis Obispo County	Public	Visitor center	10,000 gpd, 11 AF/yr.	Ocean	Not known	Inactive			
Sanita Cruz County Sanitation District	Public	Domestic	132,000 gpd, 148 AF/yr.	Seawater wells	Not known	Not known			
U.S. Navy / San Nicolas Island	Public	Domestic	24,000 gpd, 27 AF/yr.	Seawater wells	Not known	Not known			
Various offshore oil & gas platforms	Public/ (Military) Private	Platform uses	2,000 – 34,000 gpd, 2 – 38 AF/yr.	Ocean	Ocean	Active			

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PROPOSED DESALINATION FACILITIES ALONG THE CALIFORNIA COAST									
Proponent / Location:	Public/ Private:	Purpose:	Maximum Capacity:	Source Water:	Discharge:	Status:			
Resources / Encina Sand City	Public	Domestic	450,000 gpd, 20 AF/yr.	Ocean	Pipeline to ocean	Planning			
Sterling Hotel / Sand City	Private	Private development	3-14 mgd	Ocean	Pipeline to ocean	Planning			
Sanita Cruz County Sanitation District	Public	Domestic	700,000 gpd	Not known	Not known	Not known			
Carmel Area Wastewater District	Public	Power plant	Not known	Not known	Not known	Not known			
U.S. Navy, North Island Naval Air Station / San Diego	Public	Domestic	Not known	Not known	Not known	Not known			
Orange County Metropolitan Water District / Dana Point	Public	Domestic	27 mgd, 30,240 AF/yr.	Seawater wells	Injection well	Planning			
East-West Ranch / Cambria	Private	Domestic	Not known	Not known	Not known	Withdrawn			
Fort Ord State Park / Monterey County	Public	Domestic	50 mgd, 56,000 AF/yr.	Not known	Not known	Not known			
Metropolitan Water District of Southern California	Private	Domestic	5 mgd, 5600 AF/yr.	Ocean	Not known	Not known			
Monterey Bay Aquarium	Private	Aquarium visitor use	40,000 gpd, 45 AF/yr.	Ocean	Combined w/other seawater discharges	Active			
PG&E, Diablo Canyon / San Luis Obispo County	Private	Power plant	576,000 gpd, 645 AF/yr.	Ocean	Blend w/cooling water	Not known			
San Simeon / San Luis Obispo County	Public	Visitor center	10,000 gpd, 11 AF/yr.	Ocean	Not known	Inactive			
Sanita Cruz County Sanitation District	Public	Domestic	132,000 gpd, 148 AF/yr.	Seawater wells	Not known	Not known			
U.S. Navy / San Nicolas Island	Public	Domestic	24,000 gpd, 27 AF/yr.	Seawater wells	Not known	Not known			
Various offshore oil & gas platforms	Public/ (Military) Private	Platform uses	2,000 – 34,000 gpd, 2 – 38 AF/yr.	Ocean	Ocean	Active			

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