DOWNLOAD PDF PT. 4. CLASSIFICATION OF AGGREGATE RESOURCE AREAS, MONTEREY BAY PRODUCTION-CPNSUMPTION REGION.

Chapter 1 : crushed aggregate base monterey road store

Classification of aggregate resource areas, North San Francisco Bay production-consumption region -- pt. 4. Classification of aggregate resource areas, Monterey Bay production-cpnsumption region Bookplateleaf

Benthic habitat loss and modification due to fishing with bottom-contact gear; recovery of seafloor habitats resulting from management measures is unknown. Selected habitat loss or alteration may inhibit the development of assemblages, and may cause measurable but not severe declines in living resources or water quality. Damage to and loss of structure-forming and structure-building taxa due to trawl fishing; recovery of biogenic habitat resulting from management measures is unknown. Selected habitat loss or alteration has caused or is likely to cause severe declines in some but not all living resources or water quality. Contaminants No evidence of strong ecosystem level effects; no attenuation of persistent contaminants in sediments; continued input and delivery of some contaminants to deep-sea habitats. Selected contaminants may preclude full development of living resource assemblages, but are not likely to cause substantial or persistent degradation. Human Impacts High levels of previous trawl fishing, but recent reductions in trawling activity. Accumulations of marine debris from land and ocean-based human activities. Selected activities have caused or are likely to cause severe impacts, and cases to date suggest a pervasive problem. Offshore Environment Living Resources Biodiversity is variation of life at all levels of biological organization, and commonly encompasses diversity within a species genetic diversity and among species species diversity , and comparative diversity among ecosystems ecosystem diversity. Biodiversity can be measured in many ways. The simplest measure is to count the number of species found in a certain area at a specified time. This is termed species richness. Other indices of biodiversity couple species richness with a relative abundance to provide a measure of evenness and heterogeneity. When discussing "biodiversity" we primarily refer to diversity indices that include relative abundance. To our knowledge no species have become extinct within the sanctuary, so native species richness remains unchanged since sanctuary designation in Researchers have described previously unknown species i. The number of non-indigenous species has increased within the sanctuary. We do not include non-indigenous species in our estimates of native biodiversity. Key species, such as keystone species, indicators species, sensitive species and those targeted for special protection, are discussed in the responses to questions 12 and Status of key species will be addressed in question 12 and refers primarily to population numbers. Condition or health of key species will be addressed in question Key species in the sanctuary are numerous and all cannot be covered here. Emphasis is placed on examples from various primary habitats of the sanctuary for which some data on status or condition are available. What is the status of biodiversity and how is it changing? Thorough historic and current inventories are not available to fully measure biodiversity status and trends in the sanctuary. Species richness remains unchanged; no species in offshore habitats are known to have become locally extinct. However, the relative abundance of those species has been altered substantially by both natural and anthropogenic pressures. Numerous species in the sanctuary have experienced population declines in recent decades to unprecedented low levels. Conversely, a few species that were uncommon visitors in past decades have increased in abundance in recent years, such as jumbo squid. Shifts in the relative abundance of multiple species, especially those at higher trophic levels, are indicators of compromised native biodiversity in the system and impact community and ecosystem structure and function. For these reasons, the status of native biodiversity in the offshore habitats of the sanctuary is rated "fair. A historical perspective suggests that many of the higher trophic level species in the offshore environment, such as marine mammals, seabirds, and predatory fishes, have been dramatically reduced by hunting and fishing. On-going monitoring by the National Marine Fisheries Service is finding that other mammals stocks in the sanctuary remain at reduced levels e. Some locally breeding seabirds e. Abundance of non-resident species, such as Sooty Shearwaters and Black-footed Albatrosses, have also declined within the waters of Northern California Ainley and Hyrenbach unpubl. This decline is attributed in large part to

terrestrial human activities that result in the degradation or loss of breeding habitat. Decades of fishery extraction have contributed to a shift in the biodiversity of the fish assemblage in offshore waters. Based on fishery-independent trawl surveys conducted from along the U. West Coast including sampling sites throughout the Monterey Bay sanctuary , Levin et al. Populations of flatfishes, cartilaginous fishes, and small rockfishes have increased, while populations of large rockfishes have decreased. The abundance of jumbo squid Dosidicus gigas has increased recently in the sanctuary Figure 40 and may be having impacts on both regional and local biodiversity. This voracious predator consumes a variety of pelagic and semipelagic fishes, including commercially harvested species e. For example, the presence of jumbo squid in Monterey Bay surveys has been associated with declines in observations of Pacific hake Zeidberg and Robison Jumbo squid are also a key forage item for many higher trophic level fishes and marine mammals throughout their range, including toothed whales and commercially important tunas, billfishes and sharks Field These animals are likely to play a major role in structuring offshore ecosystems. The cause of the observed range expansion of jumbo squid has not been determined; possible contributing factors include a switch in the Pacific Decadal Oscillation, harvesting of large pelagic predators, and global warming. Biodiversity in deep-sea communities of the sanctuary is not well understood because of the logistical challenges of conducting research in deep water. Due to technological advances in undersea research, census and evaluation of ecological integrity of deep-sea habitats has only recently begun for midwater assemblages e. For example, surveys of whale falls and cold seep communities have led to the discovery of several new species Barry et al. There are indications that deepwater sponge and coral communities in the sanctuary have been impacted before many aspects of their basic biology and ecology could be ascertained. Overall, there is much that is unknown about the species richness and evenness of several important communities within the offshore habitats of the sanctuary. Indices of relative jumbo squid abundance over time. The number of squid caught by California commercial passenger fishing vessels north of Point Conception orange diamond and the frequency of occurrence of jumbo squid in pelagic midwater trawl surveys conducted in May and June off of the central California coast by the Southwest Fisheries Science Center SWFSC since blue triangle are shown. Modified from Field et al. What is the status of environmentally sustainable fishing and how is it changing? Environmentally sustainable fishing or ecologically sustainable fishing may be defined as fishing at a level that the ecosystem can sustain without shifting to an alternative or undesirable state. To determine if environmental fishing is occurring, one has to simultaneously consider the impacts of all harvested species on an ecosystem, and community stability and resilience Zabel et al. It is designed to consider fishery yield and the integrity of ecosystem structure, productivity, and function and biodiversity, including habitat and associated biological communities. The past decade has seen a paradigm shift in the management of fisheries from managing target stocks for maximum sustainable yield to ecosystem-based fisheries management. This shift leads to a more holistic consideration of sustaining fishery yield, as well as maintenance of marine ecosystems and their function. The status and trend ratings of "fair" and "improving" for this question are based on the available scientific knowledge e. Because this is the first Monterey Bay sanctuary condition report, the status rating reflects a more historical view of the potential effects of fishing activity on biological community development, function, and ecosystem integrity, over the last two to three decades. Subsequent reports will take a more contemporary view of the ecosystem-level impacts of fishing. The status rating does not serve as an assessment of the status of current fisheries management practices in the region. However, the determination of an increasing trend for this question does reflect recent changes in fisheries management practices and their positive effects on living resources in the sanctuary. Historical accounts, ranging over several timescales from decades to centuries, demonstrate how commercial and recreational fisheries have extracted significant biomass from waters now encompassed by the Monterey Bay sanctuary, in part using methods that are known to reduce physical complexity and damage living structures of seafloor habitats. Several species of whales, pinnipeds, and large sharks were drastically reduced, at least in part as a result of historic fishing, and are currently at depressed population levels Leet et al. The effects of reducing the abundance of currently fished stocks, in some cases to

less than 50 percent of the unfished biomass, on ecosystem health and integrity are poorly researched and understood, but have the potential to alter ecosystems. Meanwhile, scientists are just beginning to understand fundamental elements of ecosystem function - the distribution and community composition of seafloor habitats, the distribution of and habitat requirements for different life stages of important commercial species, the significance of diverse age structures in sustaining fishery resources, and many other factors that influence community development and function. For these reasons, this question is rated "fair. In the recreational fishery, commercial passenger fishing vessel anglers traditionally target rockfish, salmon, lingcod, and, opportunistically, albacore tuna CDFG b. Dungeness crab and jumbo squid are the main invertebrates targeted by the central and northern California recreational fishery CDFG b. In general, fisheries managers appear optimistic that sustainable fisheries in the offshore waters of the sanctuary are possible under new management regimes following historical stock declines. Marine communities in the Monterey Bay sanctuary are subject to complex pressures and interactions and many targeted species are long lived, therefore fishery management actions aiming to allow population recovery may experience a long lag period before changes are observed. The remaining species are either unassessed or managed in groupings or stock complexes, because individually they comprise a small part of the landed catch or stock assessments have not been completed. For some species, it is unlikely that sufficient information exists to develop adequate stock assessments. The status and management of many groundfish stocks has undergone dramatic changes over the past few decades. Beginning in the s, improved understanding of life history characteristics led fisheries scientists to conclude that many groundfish species were incapable of sustaining high-intensity fishing pressure using modern fishing methods. Over the next two decades, several groundfish stocks became depleted due to a combination of fishing and natural factors. Since the late s, some formerly depleted groundfish species have recovered quickly e. Four rockfish species - bocaccio, cowcod, yelloweye rockfish, and darkblotched rockfish - are currently considered overfished. All depleted rockfish species with stock assessment data are showing increasing trends in spawning biomass over the past 10 years Figure Moreover, 11 out of 18 rockfish species show evidence of increasing average body size since S. The recent increase in size of these fishes is consistent with a response to reduced fishing effort. Salmon have been one the most important species in both commercial and recreational fisheries in the Monterey Bay sanctuary. Managing ocean salmon fisheries is an extremely complex task, due in large part to the wide oceanic distribution of the salmon and difficulty in estimating the size of salmon populations. Salmon at all life history stages are affected by a wide variety of natural and anthropogenic factors in the ocean and on land, including ocean and climatic conditions, habitat degradation and loss, and predation including humans. Other challenges to a sustainable salmon fishery off central California coast include judging the effects of different regional fisheries on salmon stocks, competition between wild and hatchery salmon, and restoring freshwater habitat. In the last 20 years, commercial and recreational catches of salmon in California have fluctuated in response to population trends, regulatory seasons, and quotas. Many of the salmon stocks that occur off California are listed as threatened or endangered under the Endangered Species Act. Ocean salmon fisheries in California primarily target Chinook salmon since the retention of coho salmon was prohibited in the commercial and recreational fisheries in and , respectively. Recently, the low returns of Chinook salmon in two stocks, the Klamath River fall run and the Sacramento River fall run, led to very restrictive limits on commercial and recreational fishing for salmon in and a complete closure of both fisheries south of Cape Falcon, Oregon in PFMC , Pacific sardine, market squid, northern anchovy and Pacific mackerel are four of the largest volume fisheries in the state of California CDFG b. Sardine, anchovy, and mackerel stocks are assessed by the National Marine Fisheries Service, whereas market squid and anchovy stocks are monitored by the California Department of Fish and Game. Landing data dating back a couple decades show large fluctuations in harvest for each of these species Leet et al. Some of these fluctuations in landings may be due to changes in management, but it appears that population size for these species tends to be influenced strongly by prevailing oceanographic conditions Leet et al. Historically, this fishery has been cyclical with abundance peaking approximately every 10 years CDFG

b. The large fluctuation in landings is likely due to varying ocean conditions including water temperature, food availability and ocean currents Leet et al.

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Chapter 2 : concrete crushing monterey bay ca â€“ Grinding Mill China

Mineral land classification: aggregate materials in the San Francisco-Monterey Bay area. region --pt. 4. Classification of aggregate resource areas, Monterey Bay.

Concrete, Building Materials, Contracting Aggregate sand and gravel and crushed stone is the number one non-fuel Payless Rocks with Rock Bottom Prices! The draw doors are on a level with the floor of the warehouse, which is a Fill rock and sub base; Rated capacity per day: On the Monterey road, one quarter of a mile south of Oak Hill Cemetery. Kritz Trucking Volpi Ysabel Rd. Paso Robles, CA Most of the crushed rock is used as aggregate base in road There are no restaurants, grocery stores, or picnic In some cases the existing base will serve but in others, the contractor will A combination of gravel, sand and crushed rock that is usually Flexible pavement can also be helpful on roads, driveways and sidewalks The more recent uses of crushed. Lawrenceville ; granite stonemarker inscribed with road directions Singleton law office Monterey ; constructed of sandstone. Rosenbalm Rockery is the premier stone, masonry supply company in the Valley. Granite worker holding crushed aggregateâ€”a material that supports our core business. Indeed, we base our safety program on our belief that every employee deserves Redevelopment Agency of Monterey County. Reduced pollution in storm water runoff to our rivers and the Monterey Bay Reservoir base course is of open-graded crushed stone. Combine with aggregates for road base or paving mix The unauthorized grading included the importation of fill and crushed rock, and Drum plants make asphalt continuously and can store asphalt for several

Chapter 3 : Download Mineral Land Classification PDF Ebook ?

Updated aggregate resource sector map for construction aggregate in the North San Francisco Bay production-consumption region, Sonoma, Napa, Marin, and southwestern Solano Counties, California -- western and southwestern part.

Chapter 4 : City of San Leandro - Plans & CEQA Documents

Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area, Part II: Classification of Aggregate Resource Areas, South San Francisco Bay Production-Consumption Region. California.

Chapter 5 : Monterey Bay Condition Report

SR Part I: Mineral Land Classification: Aggregate Materials in the San Francisco- Monterey Bay Area: Project Description: Mineral Land Classification for Construction Aggregate in the San Francisco Monterey Bay Area.