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STAFF RECOMMENDATION

ON COASTAL CONSERVANCY ENHANCEMENT PLAN

Conservancy Project No.	CP-1-97
Staff:	RHyman-SC
File Date:	2/18/97
60th Day:	4/21/97
Staff Report:	3/19/97
Commission Meeting:	4/8-11/97

APPLICANT: California State Coastal Conservancy

PROJECT LOCATION: Approximately 155 acre portion of Carmel River State Beach known as "Odello-West," Highway One, south of Carmel-By-the-Sea, Monterey County.

PROJECT DESCRIPTION: *Carmel River Lagoon Enhancement Plan* to expand and enhance wetlands and riparian forest, provide public access, and manage floodwaters (see Ex 1).

SUBSTANTIVE FILE DOCUMENTS: Coastal permits: # 3-96-33 to CALTRANS for wetland restoration, #3-96-7 to Carmel Area Wastewater District for levee removal and road replacement, #3-93-11(pending) and #3-94-05-G(emergency) to Monterey County Department of Public Works for breaching of rivermouth; Monterey County coastal permits #PC06847 and #PC95065 to Coast Ranch for 73 residences on Odello-East; Carmel River Lagoon Enhancement Project, Coastal Conservancy Staff Report, December 5, 1996; *Point Lobos State Reserve and Carmel River State Beach General Plan, Carmel State Beach General Plan Amendment* 1996; Monterey County Local Coastal Program components: *Carmel Area Land Use Plan, Monterey County Coastal Implementation Plan* Part 4; Coastal Commission staff letters: Strnad & Hyman to Williams & Ferreira 3/2/92, Grove to several agencies 12/11/95, Hyman to Murphy 3/22/96.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends conceptual approval of the *Carmel River Lagoon Enhancement Plan* to restore approximately 155 agricultural acres to wetlands and riparian forest. Although Coastal Act policies protect prime agricultural lands and unobstructed ocean views, on balance findings can be made to support this return to important natural habitat. Some public access will also be provided consistent with Coastal Act access and recreation policies. The Coastal Conservancy has admirably taken the lead in conceptualizing and funding this resource enhancement project. The Conservancy staff report on the *Plan* envisions final engineering plans, construction specifications, environmental documents, and agency permits, which would address river mouth breaching and public access as well as determine the exact parameters of habitat restoration.

The Commission reserves the right to condition the actual project(s) that emerge from this planning process to ensure that the specifics comply with all Coastal Act policies. As explained in the recommended findings, the Commission anticipates the need for:

- a wetland management plan,
- measures to protect fish and habitat when dredging,

- spoils disposal specifications,
- post-construction monitoring,
- non-point source pollution control,
- support for remaining agricultural land in the vicinity,
- support facilities for public access,
- and an access management plan.

STAFF NOTE: CONSERVANCY PROJECT REVIEW PROCEDURE:

The California State Coastal Conservancy submitted the *Carmel River Lagoon Enhancement Plan* to the Commission on February 18, 1997 for its review and approval as required by Section 31258 of the Coastal Conservancy Act of 1976. Under Section 31258, following completion of a coastal resource enhancement plan, the Conservancy forwards the plan to the Commission for determination of plan conformity with the policies and objectives of the Coastal Act. The Commission reviews a Conservancy Enhancement Plan when it affects lands over which the Commission retains jurisdiction under Section 30519(b) of the Coastal Act, which includes (potential) public trust lands. Section 31258 provides that the Commission has 60 days to review the plan and transmit its findings to the Conservancy. If no findings are made prior to April 21, 1997, the Enhancement Plan is deemed to be approved and consistent with the Coastal Act.

Under the Coastal Act and the Coastal Conservancy Act, the Commission's task is to conduct a conceptual review of the Enhancement Plan and indicate to the Conservancy what provisions, if any, must be included in a final project or plan to find it consistent with the Coastal Act. The submitted Enhancement Plan is not an application for a coastal development permit, and prior to the Conservancy implementing the Enhancement Plan, a coastal development permit for that plan must be reviewed and approved by the Coastal Commission or its successor public agency.

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ENHANCEMENT PLAN INCLUDING LOCATION MAPS

I. STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution:

Approval

The Commission hereby grants its **approval in concept** for the *Carmel River Lagoon Enhancement Plan*, finding that the plan is in conformity with the provisions of Chapter 3 of the California Coastal Act.

II. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

A. Project Description and Future Review Process

The *Carmel River Lagoon Enhancement Plan* describes a series of projects that together will result in the reversion of approximately 155 acres of artichoke fields in wetlands and associated riparian forest. The subject site is part of Carmel River State Beach. Public access will also be provided. The elements of the *Plan* are:

- dredging the south arm of the lagoon a lineal distance of about 2,000 feet, to a depth of 2 feet below mean sea level;
- excavating a 10 acre wetland around the end of the enlarged south arm;
- restoring natural riparian vegetation on the artichoke fields;
- removing most of the river levee;
- installing a loop pedestrian trail, a through bicycle and pedestrian trail, bridges over the south arm of the lagoon and the Carmel River, and possibly an overlook trail.

A further description of the project is found in the attached Coastal Conservancy staff report and *Plan* excerpts (Exhibit 1).

A portion of the project described in the *Carmel River Lagoon Enhancement Plan* is already being implemented (considered to be "Phase One"). Pursuant to coastal permits #3-96-7 to the Carmel Area Wastewater District and #3-96-33 to CALTRANS, approximately 6 acres of wetlands and 37 acres of riparian forest are being re-created. These approved projects include:

- removing portions of the levee along south bank of lower Carmel River and along east side of Carmel River Lagoon;
- excavating sediment from south arm of Carmel River Lagoon;
- landscaping with native vegetation;

- constructing a berm to protect adjacent agriculture;
- constructing a replacement access road to the Carmel Area Wastewater District's treatment plant.

Before the remaining 110 or so acres of the site are restored, the following are scheduled to occur:

- final engineering plans and construction specifications will have to be prepared;
- environmental documents will have to be prepared for CEQA conformance;
- a coastal permit from the Coastal Commission will have to be obtained;
- other permits and approvals, such as from the U.S. Army Corps of Engineers and Department of Fish and Game, will have to be obtained and followed.

The Coastal Conservancy staff report on the *Enhancement Plan* considers the above as "Phase Two." The Conservancy anticipates a cost of approximately $200,000. It has allocated that sum to the Monterey Peninsula Regional Parks District to act as the lead agency in coordinating the listed tasks. An advisory group consisting of several agency and environmental group representatives is to be formed to guide the project and help determine the exact parameters of habitat restoration. It will be important that proper coordination occurs because various agencies each have some responsibilities at the subject site. For example, the Commission's District Director has written a letter outlining each agency's coastal permit responsibilities (12/1/95).

When final plans are completed and an application is submitted, the Commission will have the opportunity to determine whether the specifics are consistent with the Coastal Act and to apply any necessary conditions. The proposed restoration area appears to be entirely within the Commission's retained permit jurisdiction. However, until final plans are prepared this determination is not a certainty. Additionally, some other aspects of the *Plan,* such as spoils disposal and trail links, may fall within Monterey County's delegated coastal permit jurisdiction. The standard of review for such projects is the County's local coastal program, particularly the *Carmel Area Land Use Plan* and Part 4 of the *Monterey County Coastal Implementation Plan.* At this time, the Commission must and does simply find that the concepts contained in the *Carmel River Lagoon Enhancement Plan* are consistent with the following applicable Coastal Act policies:

B. Wetland and Riparian Resources

The following excerpts from the Coastal Act are applicable:

Section 30001.5 *The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:*

(a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.

Section 30230. *Marine resources shall be maintained, enhanced, and where feasible, restored....*

Section 30231. *The biological productivity and quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organism and for the protection of human health shall be maintained . . .*

Section 30233. *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted 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:...*

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary

Section 30240. *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

New Habitat: The *Enhancement Plan* would accommodate restoration of environmentally sensitive habitat. With the removal of the levees, additional areas can flood. An approximately 140 acre area would convert to woody riparian habitat (including 37 acres already permitted under permit #3-96-33). Approximately 6 acres of the current lagoon would be excavated to become seasonal (1 acre) and permanent (5 acre) freshwater wetland (already permitted under 33-96-33). Additionally, approximately 10 acres would be excavated to create a new wetland, where one historically may have existed. Therefore, this *Enhancement Plan* is a beneficial one that is conceptually consistent with the habitat goals of the Coastal Act.

Assuming successful implementation of the *Enhancement Plan*, the area of Carmel River Lagoon will roughly triple in size to become the fifth largest wetland in the Monterey Bay coastal area. This greatly expanded natural habitat will likely require management decisions to be made. Examples alluded to in these findings include how to protect and enhance the steelhead population, how and when to breach the rivermouth, and how to prevent resource conflicts due to public access. Guiding management principles are currently found in the *Point Lobos State Reserve and Carmel River State Beach General Plan* and the *Carmel Area Land Use Plan.* However, there is no detailed wetland management plan.

The Commission had anticipated that the draft *Enhancement Plan* could be revised to include at least certain management components. But, as noted, the final *Enhancement Plan* remains a document that simply outlines conceptually future physical projects. Instead, as also noted, the Coastal Conservancy will be funding a subsequent process to prepare final plans, specifications, permit applications and environmental documents. The Commission recommends that, as part of this process, an integrated wetland management plan be prepared for the current lagoon area, CALTRANS' mitigation bank site, and the proposed Phase Two restoration area to guide future use of and activities in the entire site. The management plan should incorporate the monitoring and maintenance already required of CALTRANS (permit #3-96-33) and an access management component following Monterey County Local Coastal Program guidelines (see Finding D). The plan should illustrate the final extent of wetlands and other sensitive habitats and appropriate buffers. Eventually, the *Point Lobos State Reserve and Carmel River State Beach General Plan*, the *Carmel Area Land Use Plan*, and other governing and information documents should be revised to reflect the expanded habitat boundaries and management principles. One option that deserves consideration is

to expand the "Natural Preserve" designation over the current Lagoon to encompass the entire expanded habitat area.

"Dredging" Wetlands: The *Enhancement Plan* envisions excavating sediment from the south arm of the Carmel River Lagoon, a brackish/freshwater coastal wetland. The purpose is to deepen to more historic levels this portion of the lagoon, which has filled with sediment over time. The greatest benefit is expected to be in terms of fishery resources, in particular the winter-run steelhead. This steelhead run has declined from tens of thousands of adult fish to a recent report of only 200. A major problem has been the loss of deeper, cool-water summer habitat for the juvenile fish. This project is a critical step in restoring the Carmel River's steelhead run. Dredging for such restoration purposes is a permitted use under Section 30233a(7) of the Coastal Act.

However, such excavation work could have some potential environmental impacts that must be mitigated under Section 30233. Some of this work is already approved under permit #3-96-33, with the following mitigation measures:

- work in the lagoon is restricted to July-November, when water surface levels are lowest;
- any Southwestern pond turtles or steelhead will be relocated out of the construction area and prevented from returning during construction;
- sensitive areas will be marked on plans and in the field;
- no construction is allowed in sensitive areas without prior concurrence from the State Park District Biologist or Mitigation Monitor.
- the project design will include a low flow channel and ponded areas which could act as temporary holding areas to facilitate the rescue of stranded steelhead;
- a biologist is to be on-site during excavation, with the authority to halt any unauthorized work.

Such measures should be incorporated in the final engineering plans and construction specifications for future Phase Two work as well.

Spoils Disposal: The *Enhancement Plan* lists some alternatives for spoils disposal:

- on "Odello East," comprising privately-owned, cultivated agricultural land on the inland side of Highway One which may not be developed as once permitted, thereby, no longer requiring fill;
- on the southeastern corner of the site, which is fractionally higher than the rest of the existing field, is farthest from the lagoon and falls within the County's coastal permit jurisdiction;
- spread evenly over those portions of the site slated for restoration as riparian woodland.

The Coastal Act requires that dredge spoils suitable for beach replenishment be placed accordingly. For the work already permitted under permit #3-96-33, CALTRANS submitted detailed plans on how it would use spoils: to construct the already permitted road embankment (coastal permit #3-96-07), and to reinforce the existing agricultural and wastewater plant levees. Given that the sediments and/or levees may be beach or river sand, they may be suitable for beach replenishment. It would be expected that the future Phase Two engineering drawings and construction specifications would include a contaminant analysis of excavated lagoon sediment and agricultural soils; segregation, stockpiling and re-use of soils, sand and gravel according to their respective suitability; proper disposal of any contaminated materials which are discovered; and, for any suitable spoils in excess of

project needs, placement in a manner to facilitate beach replenishment by natural processes (such as stockpiling adjacent to the active river channel).

River Mouth Breaching: The *Enhancement Plan* does not address river mouth breaching in detail. This is an important issue. If, when, and how the river mouth is breached affects the ability of the Carmel River Lagoon to function as a steelhead habitat. For example, if the lagoon is breached and empties too quickly or too early in the season, there is a danger that all the juvenile steelhead will be flushed into the hostile marine environment before they are ready to run to sea, or will be stranded on mudflats. Such breaching, performed at the wrong time of year or in a manner which too quickly empties the lagoon, would obviate the desired benefits of improved steelhead habitat resulting from this plan.

Although it occurs on State Parks property, lagoon breaching has been conducted solely by the Monterey County Department of Public Works (usually in response to flooding or threat of flooding of residential property adjacent to the urbanized north side of the lagoon). River mouth breaching is currently occurring pursuant to an interim agency agreement, but without benefit of a coastal permit. The County applied for a coastal permit as requested by Coastal Commission staff (Application No. 3-93-11). But it could not be filed as complete because it was missing key information, including scientifically-based breaching standards for the protection of resident steelhead. A subsequent one-time emergency permit was issued in February 1994. On December 11, 1995 the Coastal Commission wrote to the responsible agencies outlining the necessary follow-up to address breaching (Appendix I of 12/11/95 letter), including evaluation of alternatives to breaching. Coastal Permit # 3-96-33 conditioned any future request to use the site as a mitigation bank to be accompanied by a "final Carmel River Lagoon Enhancement Plan or equivalent that includes breaching criteria for the River mouth;" specifically, a "river mouth breaching (and/or breaching alternatives) component, which both addresses the flooding issue and establishes standards to minimize the risk of premature breaching that would harm the juvenile steelhead population." The Commission found that "the breaching issue needs to be resolved before the proposed [CALTRANS] project can be considered a viable mitigation for impacted lagoon/estuarine habitats pursuant to the Mitigation Bank proposal."

In response to 1992 Coastal Commission staff comments on a draft of the *Enhancement Plan*, the completed *Plan* adds a speculative discussion about the feasibility and desirability of breaching at various times of the year (Section 12). It does not contain a thorough analysis of the issue nor of the appropriateness of the interim criteria. It does not provide parameters for continued breaching nor does it examine possible alternatives. The Conservancy staff report approving the *Enhancement Plan* states that Phase Two implementation will include evaluation of alternatives for breaching the lagoon mouth during flood events.

The Commission thus finds that the future planning that the Conservancy is funding to implement the *Enhancement Plan* may eventually satisfy the requirements to resolve the breaching issue. The breaching criteria that are developed would allow Monterey County Department of Public Works to complete and resubmit its coastal permit application to permanently conduct this activity. However, this conceptual approval does not diminish nor delay the County's obligation to be in compliance with Coastal Act requirements, including obtaining the necessary permits (perhaps, for an interim time period), for any breaching activities that it continues to do. Also, this conceptual approval of the *Enhancement Plan* does not alter CALTRANS' obligation to have a resolution of the breaching issue prior to its use of its proposed mitigation bank on the subject site. This conceptual approval is not equivalent to approving the final enhancement plan with a breaching component required by condition

#8 of coastal permit #3-96-33. However, CALTRANS may satisfy its permit condition by participating in the future planning that will follow from the approval of the *Enhancement Plan.*

Riparian Loss Mitigation: The *Enhancement Plan's* proposed levee removal already occurred pursuant to coastal permits #3-96-7 and #3-96-33. It resulted in at least a temporary loss of up to approximately 4 acres of riparian habitat (central coast riparian scrub and north coast black cottonwood riparian forest) now found on the river and lagoon levees. In order to mitigate that loss, the removed vegetation is being replaced (work currently underway). Phase Two work to implement the remainder of the *Enhancement Plan* may result in some additional interim loss of riparian vegetation; however, overall a very substantial net gain of riparian cover would result.

Revegetation Monitoring: The *Enhancement Plan* briefly mentions that post-construction monitoring will occur. In order to ensure that the restoration succeeds and creates no unmitigated adverse impacts of its own, the following were required as part of coastal permit #3-96-33:

- replanting in accordance with the submitted phasing plan;
- preparing as-built drawings and report immediately after project completion;
- installing and irrigating restoration plantings for up to five years or until they become established, whichever is first;
- maintaining mitigation planting areas by annual (or more frequent) inspection for and eradication of, invasive exotic vegetation (e.g., pampas grass, broom, German ivy, Kikuyu grass, etc.);
- implementing a monitoring program which sets success criteria, along with methods and schedules for measuring performance, and remediation and maintenance responsibilities
- preparing three annual monitoring reports;
- hiring an environmental monitor.

The future Phase Two work undertaken to implement the *Enhancement Plan* is not planned to be mitigation and thus ensuring its success is not tied to another project approval. However, while not as critical, it can be anticipated that some level of monitoring is necessary to ensure that the project does not result in any unforeseen adverse impacts on public recreation (given that the site is a unit of the State Park system), on the adjacent mitigation bank, and on other adjacent habitat or neighboring properties and that the project has resulted in an appropriate use of public funds. Knowledge of the degree of project success would also be valuable in designing similar future restoration projects.

Adjacent Impact Prevention: The *Enhancement Plan* shows work occurring adjacent to the Carmel River, Carmel River lagoon, and a popular public beach, all within Carmel River State Beach. In order to ensure that materials or personnel do not enter or damage the river or lagoon, it is necessary to set construction limits and employ best management practices to prevent polluted runoff. Mitigation measures incorporated into the phase one project coastal permit #3-96-33 include:

- construction and sensitive habitat areas will be marked on plans and in the field to prevent damage to habitat areas;
- every reasonable precaution will be taken to prevent fuels, oils, and other harmful materials from entering the Carmel River and lagoon;
- operations will be scheduled and conducted to minimize siltation of the River and lagoon;
- temporary pollution control measures will be installed as necessary;
- a stormwater pollution prevention plan will be prepared and followed during construction;

- construction will take place during a period when impact to wildlife is minimal.

It can be expected that the final engineering plans and construction specifications for Phase Two of Implementing the *Enhancement Plan* will need to contain similar measures in order for the proposed project to be found consistent with Sections 30230, 30231, 30233 and 30240.

Other Agency Approval: The *Enhancement Plan* notes that a Clean Water Act Section 404 permit [from U.S. Army Corps of Engineers] will be needed for various components. The Conservancy staff report on the *Enhancement Plan* notes that all necessary permits must be obtained and commits funding to the Monterey Peninsula Regional Park District for this task. The resulting Phase Two project(s) will likely require approval from other agencies who also have wetland protection responsibilities such as the California Department of Fish and Game and the Regional Water Quality Control Board (RWQCB), along with the Coastal Commission. All such agencies' concerns should be incorporated into the final plans and all agencies should sign-off on the same project plans.

Summary: Whether in project plans or by conditions on the anticipated coastal permit(s), the following elements will be needed, as described in more detail above:

- a wetland management plan (including the breaching standards for the river mouth),
- measures to protect fish and habitat when dredging,
- spoils disposal specifications,
- post-construction monitoring and maintenance,
- non-point source pollution control.

If so designed or conditioned, the resultant project(s) will conform to the Coastal Act's policies regarding wetland and riparian habitats, cited above. At this time, the Commission finds the elements of the *Enhancement Plan* are conceptually consistent with and will implement these policies.

C. Agricultural Lands

The following excerpts from the Coastal Act are applicable:

Section 30241. *The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:...*

Section 30007.5. *The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources...*

Section 30200(b) *Where the commission or any local government in implementing the provisions of this division identifies a conflict between the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.*

Loss of Agricultural Land: The *Enhancement Plan* calls for conversion of prime agricultural land to wetland and riparian forest. The approximately 155 acre "Odello West" artichoke field operated on prime floodplain soils at the mouth of the Carmel River, on leased lands within Carmel River State Beach. It had been farmed since 1876. River diversion and levee construction activities were carried out after this date, most likely on an intermittent basis over the years.

Monterey County's *Carmel Area Land Use Plan* (LUP) designates the agricultural portion of the site as "Agricultural Preservation." Policy 2.6.4.2 states, "The agricultural use of the entire State-owned prime agricultural parcel should be continued." This policy was consistent with the State Parks Department's *Point Lobos State Reserve and Carmel River State Beach General Plan.* However, the *General Plan* was amended in 1996 to support the return to wetland and riparian forest. The Department pledged in its *Negative Declaration* on the *General Plan* amendment to work with the County and Coastal Commission to similarly amend the LUP. The current Land Use Plan designation needs to be viewed as advisory only as most of the site falls within the Commission's retained coastal permit jurisdiction. Nevertheless, it would be desirable (although not mandatory) for the LUP to be amended accordingly.

Coastal permit #3-96-33 already allows about 43 acres to be restored as riparian habitat.

Both agricultural lands and riparian wetlands are considered significant coastal resources under the Coastal Act. In this particular case, the proposed riparian restoration project is most protective of coastal resources, and can be distinguished from other agricultural conversion situations, because:

- the area in question historically comprised riparian and wetland habitat;
- a higher percentage of coastal wetlands have historically been lost than coastal agricultural lands;
- the project will expand the existing Carmel River lagoon ecosystem; the lagoon is a designated Natural Preserve supporting migratory waterfowl, and is a nursery area for anadromous fish; the restored areas will provide both improved wetland function and increased wetland acreage, as well as a substantial riparian buffer.

Thus, although the *Enhancement Plan* provisions do not meet the intent of Section 30241, the *Plan* can be conceptually approved, pursuant to the cited balancing provisions of the Coastal Act.

Agricultural Support: The *Enhancement Plan* does not address agricultural support. Coastal permit #3-96-33 accommodated the retention of about 100 acres of artichoke fields by constructing a new protective berm at the edge of the remaining field. This land is being farmed by the Odello Brothers under a revised State Parks lease, due to expire on May 1, 2000. The recently amended *Carmel State Beach General Plan* envisions this land reverting to natural habitat. The land contains agricultural support facilities, including a sizable wooden barn. Across the highway another 134 acres (termed "Odello-East") are also farmed by Odello Brothers, the only other substantial prime soils in the Carmel Area coastal zone. Previous Commission actions (such as on the *Carmel Area Land Use Plan*) sought to preserve enough agricultural land to remain viable. The County has issued coastal permits (PC06847, PC95065) to build 73 homes on a portion of Odello-East, preserving a portion of the agricultural field. With the recent purchase of Odello-East by the Eastwood Trust in return for public purchase of other Eastwood Big Sur viewshed land, this housing development may not occur (*The Carmel Pine Cone,* June 22, 1995, p. 1) . Thus, given that Odello-East may remain in agricultural production, activities on Odello-West should be supportive, if necessary. One option could include retaining some support area on Odello-West if it were not feasible to reconstruct support facilities on Odello-East. The *Enhancement Plan* contains but does not recommended some alternatives to full riparian restoration which preserve agricultural use on Odello-East. The *Plan's* recommended components do not discuss retention of any agricultural support facilities. The Commission recommends that this consideration occur as part of the specific follow-up Phase Two planning process.

D. Public Access

The following excerpts from the Coastal Act are applicable:

Section 30210. *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30212. *(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:*

(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

(2) adequate access exists nearby, or,

(3) agriculture would be adversely affected.

(c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.

Section 30214. *a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access ...*

(c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

The area covered by the *Enhancement Plan* is located between the nearest public road and the sea. It has the potential to provide public access to the sandy beach, to view the lagoon, and along the coastline. It is owned by the State Parks and Recreation Department. To date most of the subject site has been in agricultural production. There had been no acknowledged public access.

Future Access Facilities: Implementation of the *Enhancement Plan*, as noted, will end agricultural production and substitute wetland and riparian forest cover. *The Plan* includes the following "Access Suggestions:"(see Exhibit 1 map)

- a bicycle and pedestrian bridge crossing the south arm of the lagoon;
- a bicycle and pedestrian path crossing the Carmel River to Rio Park (on the north bank);
- a bicycle and pedestrian path to and across Highway One;
- a loop pedestrian trail through the new riparian forest;
- a trail on the hillside above the new south arm and wetland (if access becomes available -- the land is presently privately owned).

The State Parks Commission recently approved an amendment to the *Point Lobos State Reserve and Carmel River State Beach General Plan* applicable to the subject site. It calls for eventual restoration as riparian forest and wetlands. It notes that "the proposed land use change...will create an opportunity for establishing public trails through the area." It mentions some possibilities, but commits to no specific public access plans.

No public access improvements were incorporated into CALTRANS's restoration plans in application #3-96-33. Thus, the Commission required CALTRANS to participate in developing a final *Carmel River Lagoon Enhancement Plan* which includes a public access and interpretation component (Condition #8 of #3-96-33). The Commission found that "Trails could be constructed through, and to view, the restored area....Since the agency [CALTRANS] is now a major player in implementing *Plan* recommendations, their participation is warranted, so that their efforts will be consistent with and not conflict with overall wetland enhancement planning."

The Commission finds that the future planning that the Conservancy is funding to implement the *Enhancement Plan* should satisfy the requirement to plan for public access. This conceptual approval is not equivalent to approving the final enhancement plan with a public access and interpretation component, required by condition #8 of coastal permit #3-96-33. However, CALTRANS may satisfy its permit condition by participating in the future planning that will follow from the approval of the *Enhancement Plan.*

The Coastal Conservancy staff report on the *Enhancement Plan* notes that there will be an advisory committee established to guide the next phase [Two] of the project. A representative of State Parks will be included. Since the property is in State Parks ownership, falls under a State Parks general plan, and, hence, will be under State Parks management it can be expected that the Department's mandates for accommodating public access will be incorporated into the future planning. The Commission notes that the subject site offers significant opportunities for public access, consistent with resource protection. The Commission endorses that its staff's previous suggestions for low intensity visitor amenities (e.g., restroom, picnic tables) be considered in the upcoming planning process (Hyman to Murphy 3/22/96). Also, since the current *General Plan* shows a potential parking area in a location where restored wetlands are now planned, that option needs to be deleted and alternative support areas need to be addressed.

Prescriptive Rights Issues: As part of the deliberation on permit #3-96-33, the owner of an adjacent property (the Williams site) expressed concern that the implementation of CALTRANS' project may require public access on his land at some future date. The CALTRANS project, both as submitted and as conditioned, does not require a trail on the Williams property. General references to future access plans do not necessarily apply to this site as other options are certainly available and may be selected by the Coastal Conservancy and Monterey Peninsula Regional Park District in the forthcoming planning process. For this reason, this report does not analyze the appropriateness of the Williams property for access or any potential prescriptive rights to public access which may or may not exist on the site. Therefore, nothing in this conceptual approval makes any determination of any prescriptive rights on any private property located adjacent to the site. The Commission notes also that only a court can legally determine that prescriptive rights exist on a particular site.

Planning and Management Issues: As noted, the *Enhancement Plan* lacks a comprehensive public access component. It does have one map showing some possible trails, including links on private property (including the Williams site) (see Exhibit 1 map). But it does not contain details, such as trail widths, signing, etc. Neither does not contain any discussion of access management issues (e.g., temporal and user category restrictions). Completion of final engineering plans and construction specifications offers an opportunity for further study of appropriate public access. Nothing in this conceptual approval requires or predetermines any specific trail location, nor requires any public access to be shown off of public property or easements. Coastal Conservancy's planning process is the appropriate mechanism for such determinations. Furthermore, submittal of any final plans which

show possible future public access on private property would only mean that such access could then be pursued according to Constitutional and other legal means.

The *Carmel Area Land Use Plan* and Part 4 of the *Monterey County Coastal Implementation Plan* have appropriate access management criteria and procedures (especially Chapter 5.3 of the LUP and Section 20.146.130 of the IP). While these Local Coastal Program provisions would not be mandatory for the Commission to follow, they contain valuable guidance for preparing access management plans. The Commission would anticipate that the final Phase Two planning work contain an access management component (which could be incorporated into a wetland management plan).

In conclusion, the Commission (and possibly Monterey County) will have the opportunity, during review of the required coastal development permit(s), to examine in greater detail the specific public access and recreational components of the project. At that time assurances that Coastal Act (and local coastal program) policies to provide public access are followed, as well as that any impacts from the specific access proposals are mitigated and that private property rights are respected, can be made. At this time the Commission finds that the concepts for providing public access in the *Enhancement Plan* are consistent with the cited Coastal Act policies.

E. Flood Hazard

The following excerpt from the Coastal Act is applicable:

Section 30253: *(a) New development shall: (1) Minimize risks to life and property in area of high geologic, flood, and fire hazard.*

The *Enhancement Plan* would help minimize risk to life and property by creating a vegetated floodway. Removing the already-breached south bank levee along the Carmel River allows flood waters to more freely flow across the river's historic floodplain within undeveloped land at Carmel River State Beach. This helps protect residences on the other side of the River that currently experience flooding when the north bank levees break or are overtopped. This concept is consistent with Section 30253a(1).

Monterey County Water Resources Agency is responsible for flood protection in this area. Therefore, the Agency should be consulted to ensure that the proposed project is consistent with their floodway management plans. The Conservancy staff report on the *Enhancement Plan* notes that this agency will be a member of the advisory committee established to guide the next phase (Two) of the project.

F. Visual Resources

The following excerpt from the Coastal Act is applicable in conjunction with Sections 30007.5 and 30200(b) cited above:

Section 30251. *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas*

such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The proposed project is located on highly scenic land. It is an area so designated in the *California Coastline Preservation and Recreation Plan.* It is at the gateway to the Big Sur Coast; the beginning of the rural coastal area south of the urbanized Monterey Peninsula. To date, scenic protection has been achieved by promoting and retaining the cultivation of low-growing crops (artichokes). Recently, as noted, the State Parks Commission approved an amendment to the *Point Lobos State Reserve and Carmel River State Beach General Plan* applicable to the subject site. It calls for eventual restoration of riparian forest and wetlands. The fate of the existing rustic wooden barn is not identified. This action was consummated with the acknowledgment that the view would be permanently altered to a more natural, but more ocean-obscuring vegetative complex. The Negative Declaration on the *General Plan* amendment concluded, " Although the viewing distance will be reduced, the complexity and natural character of the view will be enhanced."

For the stated reasons, given the cited balancing provisions of the Coastal Act, the *Enhancement Plan* is conceptually consistent with the Coastal Act.

G. California Environmental Quality Act (CEQA)

No environmental document has been prepared specifically for the *Carmel River Lagoon Enhancement Plan.* In approving the *Plan* the Conservancy relied on State Parks' *Negative Declaration* for its *General Plan* amendment. Like the *Enhancement Plan,* that document was conceptual. The Conservancy concurred that the project will have no significant adverse effects on the environment, as defined in 14 California Code of Regulations Section 15382. The Conservancy also noted that "further environmental review will likely be necessary after completion of final engineering plans, prior to any intended construction. Appropriate environmental documents will be completed and circulated as necessary at that time."

H. Approval in Concept

In conclusion, the Commission grants its approval in concept to the *Carmel River Lagoon Enhancement Plan.* The project proponent (be it the Coastal Conservancy or another entity) must apply for and receive a coastal development permit from the Commission before implementing the *Enhancement Plan* or portion(s) thereof. The project proponent (be it the Coastal Conservancy or another entity) must also apply for and receive a coastal development permit from Monterey County for any proposed work (e.g., trail connections) in the County's coastal permit jurisdiction. At that time, the permit applicant(s) will need to demonstrate that the *Enhancement Plan* is fully consistent with the Chapter 3 policies of the Coastal Act and (with respect to the County's coastal permit jurisdiction) the relevant *Carmel Area Land Use Plan* provisions.

COASTAL CONSERVANCY

Project Summary
December 5, 1996

CARMEL RIVER LAGOON ENHANCEMENT PROJECT

File No. 87-040
Project Manager: Carol Arnold

)MMENDED ACTION: Approval of the Carmel River Lagoon Enhancement Plan and authorization to disburse funds to the Monterey Peninsula Regional Park District to prepare final engineering plans and specifications to implement the Plan.

LOCATION: Mouth of the Carmel River, south of Carmel, Monterey County (see Location Map, Exhibit A and Project Site Map, Exhibit B)

)GRAM CATEGORY: Resource Enhancement

ESTIMATED COST:

Coastal Conservancy Funds:	$200,000
Technical Assistance (in-kind):	20,000
Caltrans:	300,000
Monterey County Water Resources Agency:	50,000
Monterey Peninsula Regional Park District:	4,000
TOTAL COST:	$574,000

ROJECT SUMMARY: The Carmel River Lagoon Enhancement Plan (Plan) recommends various actions to expand and enhance wetlands, provide public access, and manage floodwaters on about 200 acres in the lower portion of the Carmel River, west of Highway One. If approved, this authorization will result in the completion of final engineering plans, construction specifications and environmental documents, and acquisition of permits so that the Plan's recommendations can be fully implemented.

The Plan's recommendations are conceptual in nature and are being implemented in two phases. Phase One consists of levee removal on the south bank of the river and riparian wetland restoration on the northern 40 acres of an agricultural field directly south of the river. These actions are being implemented by Caltrans and the Monterey County Water Resources Agency and are currently under construction.

Phase Two will consist of implementing the remaining recommendations of the Plan including dredging the south arm of the Carmel River Lagoon, revegetating the remaining 110 acres of the agricultural field, and trail construction. In order to move

forward with this phase of implementation, final engineering plans and construction specifications must be prepared, additional environmental documents may have to be completed, and all necessary permits must be obtained. If the current authorization is approved, these tasks will be completed by the Monterey Peninsula Regional Park District, working with the Conservancy, the State Department of Parks and Recreation, and the Monterey County Water Resources Agency. Staff would likely return to the Board after completion of these documents for some portion of construction funding.

The Carmel River was formerly one of the State's most important steelhead fisheries. Steelhead populations have declined drastically in recent years throughout the State and the fishery is currently being considered for federal threatened or endangered species listing. In the Carmel River, fish populations have declined from around 20,000 in the 1920s to only a few hundred in the early 1990s. This run is considered one of the most threatened steelhead fisheries in the State. The construction of levees and dams, loss of riparian wetlands, and water diversions are the main problems on the Carmel River that have caused these declines.

In response to these problems, in 1988 the Conservancy initiated the enhancement planning effort for the Carmel River lagoon and associated wetlands, in partnership with the Carmel River Steelhead Association, a local nonprofit organization concerned with the steelhead fishery decline. Other partners included State Parks (the landowner of most of the land subject to the Plan), the Monterey County Water Resources Agency, the Monterey Peninsula Water Management Agency, and the Department of Fish and Game. During the planning process, new opportunities presented themselves, including the use of part of the subject site as a potential mitigation bank by Caltrans. This slowed the planning process, but increased the number of partners and potential funding sources for Plan implementation.

One of the Plan's major recommendations is the restoration of approximately 155 acres of agricultural land owned by State Parks to natural floodplain, revegetated with a diverse mix of riparian plant species. The Carmel State Beach General Plan was amended in March 1996 to redesignate the agricultural land as native habitat. The restoration of the agricultural land will not only significantly expand riparian wetland habitat, providing shade, cover and an increased water area for steelhead, it will also greatly reduce the threat of flooding on adjacent residential properties by allowing floodwaters to overflow on the project site, and will offer the public the opportunity to view wildlife from nearby access trails.

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COASTAL CONSERVANCY

Staff Recommendation
December 5, 1996

CARMEL RIVER LAGOON ENHANCEMENT PROJECT

File No. 87-040
Project Manager: Carol Arnold

STAFF RECOMMENDATION: Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251-31270 of the Public Resources Code:

"The State Coastal Conservancy hereby approves the Carmel River Lagoon Enhancement Plan described in the accompanying staff report and attached as its Exhibit C, and authorizes the disbursement of an amount not to exceed two hundred thousand dollars ($200,000) to the Monterey Peninsula Regional Park District to prepare final engineering plans and specifications, evaluate flood control alternatives, provide permit application assistance, and undertake additional environmental analysis necessary for implementation of the Plan, subject to the following conditions:

Prior to the disbursement of any funds:

1. The Executive Officer of the Conservancy shall approve, in writing, a final work program, budget and time schedule and any contractors or subcontractors that the Park District intends to employ; and

2. The Coastal Commission shall have an opportunity to review the consistency of the Carmel River Enhancement Plan with the policies and objectives of the Coastal Act, as provided in California Public Resources Code Section 31258(a)."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the purposes and criteria set forth in Chapter 6 of Division 21 of the California Public Resources Code (Sections 31251-31270) regarding enhancement of coastal resources;

2. The proposed project is consistent with the guidelines and criteria set forth in the Conservancy's Resource

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Enhancement Program Announcement adopted March 25, 1985;

3. The project site has been identified in the Monterey County Local Coastal Plan's Carmel Area Land Use Plan as an environmentally sensitive area requiring public action to resolve existing or potential resource protection problems;

4. The Monterey Peninsula Regional Park District is a local public agency as required by California Public Resources Codes Sections 31010 and 31251; and

5. The Conservancy has reviewed the Initial Study and Negative Declaration prepared by the State Department of Parks and Recreation for the Carmel River State Beach General Plan Amendment (see Negative Declaration, Exhibit D to the accompanying staff recommendation), which considered the concepts and recommendations of the Carmel River Enhancement Plan. The Conservancy finds that there is no substantial evidence that implementation of the Carmel River Enhancement Plan will have a significant effect on the environment as defined in 14 California Code of Regulations Section 15382."

STAFF DISCUSSION:

Project Description: This project will result in the preparation of final engineering plans and specifications, and all other planning actions necessary to proceed to full implementation of the Carmel River Lagoon Enhancement Plan.

The enhancement measures recommended in the Plan are designed to restore the Carmel River lagoon and surrounding area to more closely replicate conditions that existed around 1876, before the lower river was extensively leveed and the floodplain cleared for agriculture. The south arm of the Carmel River lagoon will be dredged to extend its current length to about 2,000 feet, with a depth of approximately two feet below mean sea level. An approximately ten-acre wetland will be excavated around the end of the enlarged south arm. Natural riparian vegetation will be restored on the artichoke field west of Highway One and levees along the south bank of the river and west of Highway One will be removed. A primary goal of these enhancement measures is to expand and improve habitat for juvenile steelhead which use the lagoon and associated wetlands during their first year of life, as well as other native fish and wildlife species that occupy this area. These actions will also result in improved floodwater management, as the river will be allowed to overflow onto the restored agricultural field instead of being confined to a narrow

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channel that lacks the capacity to contain flows during large flood events.

In addition to these enhancement activities, the Plan recommends an access trail that would cross the river via a bridge near the mouth, linking the Coastal Trail segments that wind through the southern portion of the City of Carmel to north of the river, and from south of the river toward Pt. Lobos. Currently, the State Beach is not accessible from the north during the four months of the year that the mouth of the river is open without traveling along city streets about a mile upstream to cross the river and return to the Beach. The Plan also discusses several alternatives for breaching the mouth of the lagoon during flood events. These alternatives require additional evaluation which will be conducted if this authorization is approved.

The Enhancement Plan is being implemented in two phases. Phase One consists of actions being taken by Caltrans and the Monterey County Water Resources Agency to remove the levee south of the river and revegetate the northern 40 acres of the agricultural field. Caltrans will be using these 40 acres as a mitigation bank for impacts related to road and bridge development. Extensive planning has taken place over the last several years for both the Caltrans and Water Resources Agency projects, and implementation of this part of the project is now moving ahead.

Phase Two, the subject of this recommendation, will consist of implementing the remaining recommendations of the Plan, including dredging the south arm of the lagoon, revegetating the remaining 115 acres of the artichoke field with riparian plant species, removal of additional levees, evaluation of alternatives for breaching the lagoon mouth during flood events, and construction of a bridge and trails (see Exhibits E and F, Enhancement Plan and Access Maps).

Site Description: The project site is located west of Highway One. To the north, it is surrounded by residential development, Mission Ranch Inn (a resort development), and the Carmel Area Wastewater District treatment facilities. To the east is Highway One, and to the south are developed bluffs. South of the river and directly west of the Highway is a 155-acre agricultural field which is leased by State Parks for private sector artichoke production.

About 50 acres of the site consist of an open water lagoon, mixed riparian forest, brackish and saltwater wetlands, a sandy beach, and coastal bluffs. The Carmel River lagoon and wetlands lie along the bottomlands of the lower Carmel River and immediately adjacent to the sand bar on Carmel River State Beach. The lagoon and wetlands are contained within a State preserve, which is part of the larger State Park unit of Carmel River State Beach. The wetlands are dominated by California tules in the fresh to brackish water, and pickleweed, fleshy jaumea, and salt grass near and in the salt marsh.

The marsh and lagoon attract many birds including ducks, mergansers, grebes, plovers, and sandpipers. Both brown and white pelicans frequent the lagoon, as well as Canada geese, herons, and rails. A number of unusual bird sightings are reported in this area. It is considered by birders to be a "vagrant trap" — an area where bird species are often seen outside their normal range. The ease with which birds can be observed on the lagoon and the surrounding sandy and marsh areas, and the relative frequency of their occurrence, make this a favorite site for birders.

The Carmel River was historically one of the most important steelhead runs in the southern part of the fishery's range. These anadromous fish spend their adult years in the Pacific Ocean and return to spawn in the streams where they were born. Adults migrate up the river on high water flows to spawn in the Carmel River. Juveniles spend part of their first year in the lagoon at the mouth, where they increase their size before entering the ocean. Population declines in recent years have brought the fishery to near extinction.

The Carmel River drains a 255-square-mile watershed within the Santa Lucia and Sierra de Salinas mountains. Beginning at 5,000 feet above sea level, the river flows for 36 miles through a steep, remote, relatively undeveloped portion of the coastal range into a wide floodplain within Carmel Valley, then into sea. The floodplain has been moderately developed with large, estate type homes in some of the inland areas, and more intensive suburban development in the lower section. Agriculture has replaced historic riparian wetlands on the floodplain near the river's mouth. Two dams, constructed primarily for water supply, impede the river's flow - the San Clemente Dam at mile 18.5 and the Los Padres Dam at river mile 23.5. The Carmel River is the principal water source for residents of the Monterey Peninsula. Since the San Clemente Dam was constructed in 1921, the river ceased being a perennial stream, and is usually dry in much of its lower reach in late summer.

Project History: As mentioned above, in prior years the Carmel River was considered one of the most important steelhead fisheries in the state; however, steelhead population levels have declined drastically in recent years. The California Advisory Committee on Salmon and Steelhead has estimated 20,000 steelhead in the Carmel River in 1928. In the 1960s, runs were down to between 1,000 and 3,000 fish. Currently, according to recent studies, the population has declined to less than a few hundred fish. The Carmel River steelhead run is proposed for federal endangered species listing. A decision regarding listing will most likely be made in the Fall of 1997.

Hydrological flows in the river have been substantially altered, primarily by the construction of two dams in the upper watershed, diking in the lower watershed for urban development and agriculture, and water diversions for urban or agricultural use.

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The river is subject to periodic extreme flood events which, because of loss of natural floodplain, result in substantial damage to developed and agricultural areas. The County must resort to artificial openings of the lagoon mouth to prevent flooding, which can have detrimental effects on juvenile steelhead and other aquatic species.

In response to these concerns, in 1988, the Coastal Conservancy provided $35,000 to the Carmel River Steelhead Association to help fund the Carmel River Lagoon Enhancement Plan. The total cost of the Plan was $110,000, with the Monterey County Water Resources Agency, the Monterey Peninsula Water Management District, and the State Department of Parks and Recreation providing the remainder of the funds (or in-kind services).

A draft Carmel River Lagoon Enhancement Plan was completed in 1992 and was circulated for review. Delays occurred in producing the final Plan due to several unforeseen events. Caltrans became interested in some of the Plan's recommendations for restoring floodplain on the northern portion of the 155-acre artichoke field owned by State Parks to use as a mitigation bank for impacts related to road improvements. Then, in early 1995, extreme flood events caused the Monterey County Water Resources Agency to move forward with implementing flood control improvements that were recommended in the draft Plan. These related projects are being implemented and financed by Caltrans and the Monterey County Water Resources Agency. They are referred to in this staff recommendation as Phase One of the Carmel River Enhancement Plan implementation. Phase One requires no additional planning work.

Another delay was caused by State Park's need to amend its General Plan for Carmel River State Beach to designate the artichoke field for wetland restoration and public access. This property was purchased by State Parks in the 70s to preserve it from a potential residential development. Approved in May, 1979, the original General Plan recommended that the prepay remain in agricultural use "as long as possible." Since that time, the property has been leased for artichoke production to a local farmer.

There is now a consensus among all agencies and organizations which helped to develop the Carmel River Enhancement Plan that restoration of the agricultural field to riparian wetlands will not only help improve the steelhead fishery and provide habitat for many bird and wildlife species, but will also address the problems of flooding of developed areas on the north bank of the Carmel River by removing the levee on the south bank to allow overflow to occur. In order to move forward with this recommendation, in March 1996 State Parks amended its General Plan to change the land use on the artichoke field from agriculture to native habitat and public access.

Project Financing: Engineering plans, construction specifications, further evaluation of alternatives for breaching the lagoon mouth, environmental documents, and permit compliance are expected to cost approximately $200,000 for the portion of the project that will be implemented in Phase Two. If this authorization is approved, the Conservancy will provide funds to the Monterey Peninsula Regional Park District to complete these tasks. Staff expects to provide technical assistance as in-kind services valued at about $20,000. Caltrans and the Monterey County Water Resources Agency have provided over $350,000 in engineering costs for Phase One, and the Regional Park District has contributed $4,000 for access planning. Thus, the total cost for preparation of final engineering plans, specifications and environmental documents, and permit compliance for the entire project is approximately $574,000.

As mentioned above, implementation is proceeding in two phases. The first phase is already in construction, financed by Caltrans and the Monterey County Water Resources Agency. Construction of the second phase will be financed through a combined program of several agencies. Likely contributors would be State Parks, the Monterey Peninsula Regional Park District (public access), the Conservancy, and grant funding programs such as the California Department of Transportation Environmental Enhancement and Mitigation Program.

LOCAL SUPPORT: This project has extensive public support (see Letters of Support attached as Exhibit G). The project has been thoroughly reviewed by many different agencies and organizations including State Parks, the Monterey Peninsula Regional Park District, the Monterey County Water Resources Agency, the Monterey Peninsula Water Management Agency, the Carmel River Steelhead Association, the Carmel Area Wastewater District, the Monterey County Board of Supervisors, the Department of Fish and Game, and Caltrans. All concur that this project will greatly enhance the resources at the Carmel River mouth.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION: This project would be undertaken pursuant to Chapter 6 of the Conservancy's enabling legislation (California Public Resources Code, Sections 31251-31270).

Consistent with Section 31251, the project will enhance the natural and scenic character of the lower Carmel River area by expanding and restoring wetlands.

Consistent with Section 31252, the project area is identified as an environmentally sensitive habitat in Monterey County's Carmel Area Land Use Plan. The LUP recommends public action to resolve existing or potential resource problems through the

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"restoration of sensitive plant habitats on public . . . lands" that are designated as environmentally sensitive habitat.

Under Section 31253, the Conservancy may provided up to the total cost of any coastal resource enhancement project. Consistent with Section 31253, the level of Conservancy funding for this project has been determined through consideration of the total amount of funding available for coastal resource enhancement projects and the relative urgency of the project.

CONSISTENCY WITH CONSERVANCY'S PROGRAM GUIDELINES:

This project is consistent with the Conservancy's resource enhancement program announcement for the following reasons:

Significance: The State Beach and Preserve at the river mouth attract over 250,000 visitors per year. In the past, the Carmel River supported over 10,000 angling hours annually. Enhancement and expansion of the Carmel River mouth wetlands would help to assure the continued recreational uses of this area and would also result in improved habitat in an area that has experienced significant wetland loss. Furthermore, the Carmel River steelhead run has been proposed for federal endangered species listing. This project would enhance habitat for steelhead, as well as other aquatic, bird and wildlife species.

Scope: This project will result in final plans and specifications for implementation. Project partners represent a wide variety of interests, including recreation, flood control, transportation, water quantity and quality, and wildlife concerns.

Cooperation and Support: There will be an advisory committee established to guide this next phase of the project. The Committee will be led by staff from the Conservancy and the Monterey Peninsula Regional Park District, and members will include the Monterey County Water Resources Agency, State Parks, the Carmel Area Wastewater District, the Monterey Peninsula Water Management Agency, Caltrans, and environmental groups.

Urgency: Habitat improvements recommended in the Plan must proceed soon in order to increase juvenile steelhead rearing capabilities at the mouth of the river. The steelhead population has declined to less than a few hundred fish. Flood control improvements recommended in the plan must also be implemented soon to avoid the loss of property experienced in recent large flood events, as well as the negative environmental impacts of current practices.

APPLICABLE COASTAL ACT POLICIES:

The proposed project is consistent with the following specific policies of the Coastal Act:

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Section 30210 of the Public Resources Code states that "maximum access . . . shall be provided for all the people consistent with . . . the need to protect . . . natural resource areas from overuse."

Section 30231 of the Public Resources Code states that the "biological productivity and the quality of coastal waters, streams, wetlands, estuaries and lakes appropriate to maintain optimum populations of marine organisms . . . shall be maintained, and where feasible, restored. . . ."

Section 30240 states that "[E]nvironmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas."

CONSISTENCY WITH MONTEREY COUNTY CARMEL AREA LAND USE PLAN:

The certified Monterey County Local Coastal Plan's Carmel Area Land Use Plan identifies the agricultural property on the project site as "Agriculture Preserve," but also designates the project site as "environmentally sensitive habitat." The LCP states that "the County should encourage the restoration of sensitive plant habitats on public and private lands" within environmentally sensitive areas.

These policies must be viewed as advisory only. The Coastal Commission retains jurisdiction over the entire project area (see Exhibit H) due to the fact that the project site is designated "coastal wetlands," although much of the site is actually former wetlands, now diked for agriculture use. The Commission's coastal permit jurisdiction was not and cannot be delegated in this area and the standards of review for development are the policies of Chapter 3 of the Coastal Act regarding Coastal Resources Planning and Management. As described under "Applicable Coastal Act Policies" above, the Enhancement Plan's recommendations are consistent with these policies.

COMPLIANCE WITH CEQA:

The State Department of Parks and Recreation filed an initial study and proposed negative declaration for the Carmel River State Beach Preliminary General Plan Amendment on December 5, 1996. The General Plan Amendment changes the land use on the 155-acre artichoke field in question from agriculture to native habitat and passive recreational use. The Negative Declaration identified no significant effects. The comment period ended January 4, 1996. A letter of support was received from the Department of Fish and Game. No other comments were received. State Parks filed its Notice of Determination to the Office of Planning and Research on January 19, 1996.

The CEQA review process for the General Plan Amendment considered the concepts and recommendations of the Carmel

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River Enhancement Plan and evaluated the impacts of the project. Staff has reviewed State Park's Negative Declaration and Initial Study Checklist (copies attached as Exhibit D) for the Carmel River State Beach General Plan Amendment, and recommends that the Conservancy concur that the project will have no significant adverse effects on the environment, as defined in 14 California Code of Regulations Section 15382. Further environmental review will likely be necessary after completion of final engineering plans, prior to any intended construction. Appropriate environmental documents will be completed and circulated as necessary at that time.

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EXHIBIT C

Enhancement Plan

~~*Distributed to Board Members only*~~

(pertinent excerpts follow)

CP-1-97

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CARMEL RIVER LAGOON ENHANCEMENT PLAN

Prepared for

Carmel River Steelhead Association
California State Coastal Conservancy
Monterey County Water Resources Agency
Monterey Peninsula Water Management District
in cooperation with
California Department of Parks and Recreation

Prepared by

John Williams, Ph.D.
Associated Consultant

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Philip Williams & Associates, Ltd.

June 1992

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Carmel River Enhancement Plan

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II. SUMMARY: SITE CONDITIONS, GOALS, AND RECOMMENDATIONS

A. SITE CONDITIONS

1. The Carmel River lagoon is a dynamic feature of the landscape that adjusts to the flow of water and sediment in the Carmel River, and is subject to major disruption from large floods. The present narrow configuration of the lagoon is probably a consequence of the lack of major floods for over half a century.

2. Historically, the South Arm of the lagoon was much longer than it is now, and may have provided valuable summer habitat for juvenile steelhead.

3. The artichoke fields are part of the natural floodplain of the river, and the natural vegetation of the fields was riparian forest.

4. In natural conditions, overland flow across the vegetated floodplain during minor floods probably scoured the South Arm.

5. The wetland north of the lagoon has been partially filled, initially for pasture, and subsequently for housing.

6. The natural hydrology of the lagoon has been disrupted by the need to open the mouth of the river artificially in order to prevent flooding of the houses built on filled wetland, and by upstream diversions of water from the Carmel River for municipal and agricultural use.

7. The regional importance of the lagoon and wetland for wildlife is greater now than in the historic past, because of the loss of extensive wetlands in the lower Salinas Valley.

B. ENHANCEMENT GOALS

The proposed goals for the Carmel River Lagoon and Wetland Enhancement Plan are to:

1. Restore the lagoon, wetland and adjacent areas to natural conditions, to the extent feasible, using the 1876 map as the best indicator of natural conditions.

2. Use an "ecosystem approach" in the restoration and management of the lagoon wetland and adjacent areas; management should aim for the creation and maintenance of a functional wetland-riparian system.

3. Employ restoration techniques that allow long-term, low-cost and low-technology maintenance.

4. Develop restoration measures that are compatible with flood control objectives around the lagoon and along the lower Carmel River, provided that these are consistent with the maintenance of natural conditions or natural resource values in the study area.

CONCEPTUAL ENHANCEMENT PLAN

Introduction

The enhancement program developed in this report consists of several independent elements dealing with the South Arm, the artichoke fields, and the existing wetland north of the lagoon. Figure 9-1 and Plate 1 show the recommended plan, in which:

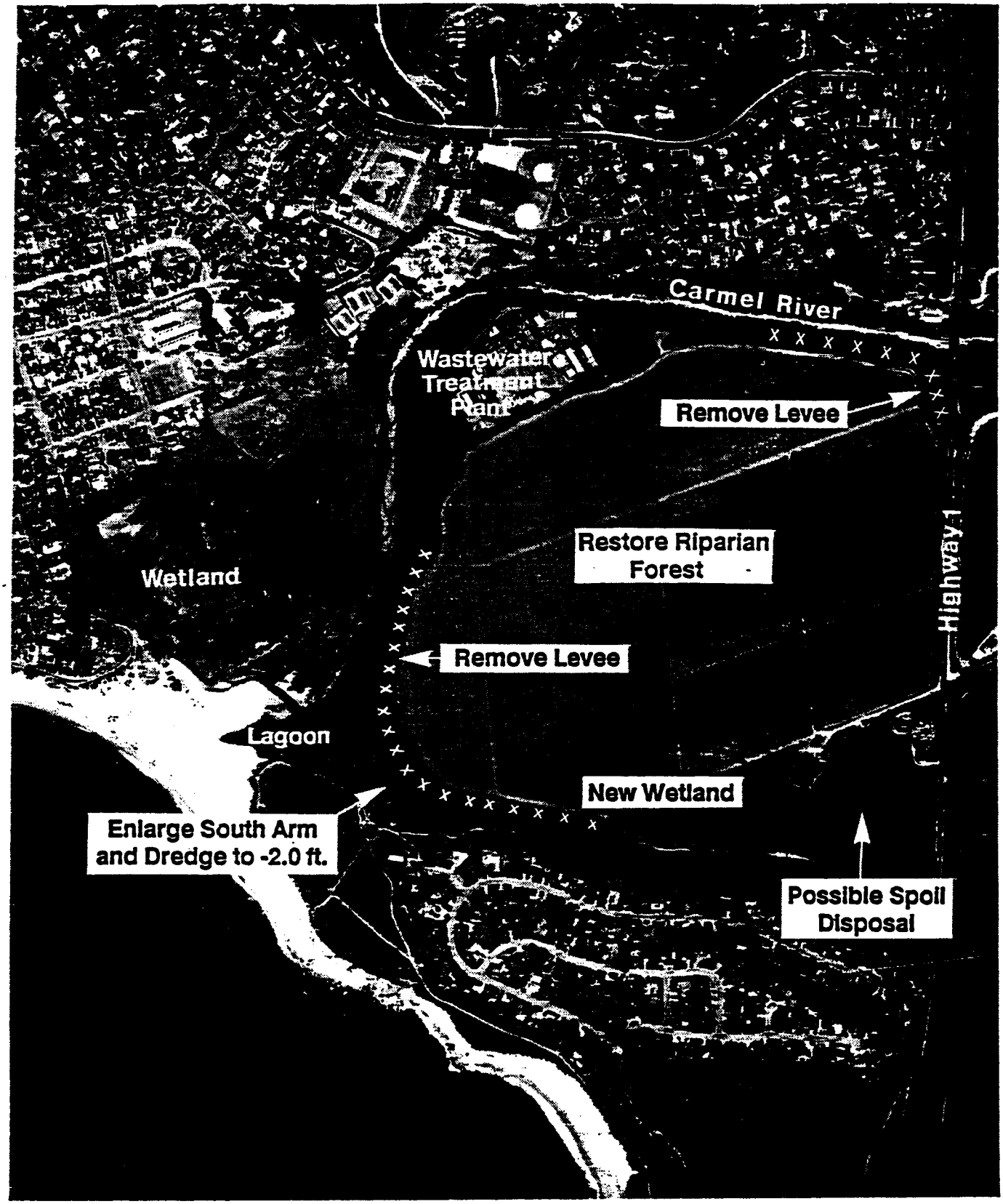
1. The South Arm of the lagoon would be dredged to approximately its length in 1876, about 2,000 feet, with the bottom about 2 ft. below mean sea level. This is presented as Option A.

2. A 10 acre wetland would be excavated around the end of the enlarged South Arm. This is presented as Option B.

3. Natural riparian vegetation would be restored on the artichoke fields west of Highway 1. This is presented as Option C.

4. Most of the levee south of the river and west of Highway 1 would be removed (mainly as part of a flood control project, and partly as a component of this enhancement plan).

The elements of the recommended plan and several other options are described and evaluated in the following sections. Assuming that revegetation is done by the Department of Parks and Recreation using CCC labor, the estimated cost of the recommended plan is $1,263,000.



Recommended Enhancement Plan

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FIGURE 9-1

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THE RECOMMENDED PLAN

A. Dredge the south arm (Recommended)

1. Concept: Enlarge the south arm of the lagoon (Figure 9-2).

2. Rationale:

This would restore the south arm to the length shown on the 1876 map, and provide more open water habitat for water birds and fish.

3. Implementation:

The south arm would be excavated to -2.0 feet, with occasional deep spots excavated to -5 feet, giving an additional open water area of over an acre. The excavation would be slightly sinuous to limit line-of-sight along the channel. Willow and cottonwood cuttings would be planted along 1300 feet of the north bank, and where needed along the south bank, to provide shade and cover. To restore natural conditions and allow overland flow to scour the arm, the levee between the arm and the present artichoke fields should be removed; however, if it is necessary to reduce costs, removal can be limited to about 200 feet at the southeastern end. Approximately 25,000 cubic yards of material would need to be removed (dense vegetation limits the accuracy of topographic mapping in this area, so this volume estimate is correspondingly uncertain).

Using a hydraulic excavator and trucks to dig and remove material would cost about $10 per cubic yard, or about $250,000 total. Using conventional engineering estimates of planning, engineering, and supervision costs (which may be high for this kind of project) and a 10% contingency cost, the total cost of the excavation would be about $350,000 (Table 9-1). It may be possible to use dredging equipment to excavate the channel (but not the levee) at a lower cost. Assuming that half the material could be dredged for $6 per yard, the total excavation cost would be about $280,000. After drying, spoils could be placed either along the highway fill at the eastern edge of the study area, or across the highway in Odello East (if development there is approved, fill will be needed to raise the buildings above flood level). Approximately 1,300 willow and cottonwood cuttings or alder seedlings would be planted three feet apart in three rows at 10 ft. spacing: 25% survival to maturity would produce a good stand. Assuming 1,000 willows and cottonwoods at $15 per cutting, and 300 alder seedlings at $20, the cost of revegetation would be $21,000. If possible, cuttings should be obtained locally, and should reflect the species mix in the local riparian forest: *Alnus rhombifolia, Populous tricocarpa, Salix lasiolepis, S. lavigata, S. Coulteri*. Cuttings planted in trenches at the level of the artichoke field should not require irrigation, but alder seedlings and cuttings planted on remaining levees will require irrigation through at least one summer.

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A Clean Water Act Section 404 Permit will be needed for this project.

4. Evaluation:

The excavated channel would add significantly to the open water area of the lagoon, which is now about 6 acres when the water level is at +3 ft. It would greatly increase the area of *deep*, water, and the length of edge between open water and wetland or riparian vegetation.

The enlarged south arm may provide a refuge that would allow juvenile steelhead to survive through the late summer and fall. This would depend upon riparian trees providing enough shade to keep water temperatures down, and to inhibit the growth of algae and pondweed, which decompose late in the summer to produce high CO_2 levels. The trees would also provide cover from terns and pelicans, although they may also provide hunting perches for kingfishers and herons.

This option can be implemented regardless of what is done elsewhere in the study area, although the length of the excavation would be somewhat reduced if the status quo were maintained in the artichoke fields.

B Create new wetland (Recommended)

1. Concept:

Create new wetland, replacing the area of historical wetland north of the lagoon that has been filled (Figure 9-3).

2. Rationale:

Coastal wetlands are critical habitat for many species; good opportunities for wetland restoration should be realized.

3. Implementation:

New wetland can be created by excavating land adjacent to the lengthened south arm down to wetland elevations. Wetland vegetation could be allowed to colonize the area naturally. If 10 acres of wetland were created by lowering elevations an average of 6 feet, about 100,000 cubic yards of earth would need to be removed. Scrapers could be used to remove dry soil at a cost of about only about $3 per yard, with topsoil stored for final spreading to recreate an appropriate soil profile (Table 9-2). Hydraulic excavators may be required to remove deeper, saturated material, which would increase costs.

4. Evaluation:

The area around the end of the dredged south arm is a favorable site for creation of wetland because it is isolated from the main channel of the river, and should experience minimal deposition from normal winter flows. High water levels in the spring or early summer will be critical for the establishment of wetland vegetation. The size of the wetland can vary, but the problem of spoil disposal will increase with its area. Spreading 100,000 cubic yards over 100 acres would give a layer about 7.5 inches deep, which would start to have a significant effect on flood elevations. If the excavated material were used for fill on Odello East, this constraint would be relaxed. Material could also be built up in the southern corner of the artichoke field, as shown in Figure 9-2, although this would make it more difficult to establish riparian vegetation there.

C. Restore riparian forest (Recommended)

1. Concept:

Create a forest dominated by cottonwoods and willows on the fields west of Highway 1 now used for artichokes (Figure 9-1).

2. Rationale:

This would restore the natural vegetation and habitat value of the area.

3. Implementation:

This is a favorable site for restoring riparian forest. The topography has been altered only slightly, and County's flood management project would largely restore the natural overbank flows in the area by partial removal of the levees along the south side of the river (see Figure 8-1). Soils and groundwater levels are favorable, and high capacity wells on the site would allow irrigation of new plantings.

Restoration should aim at a forest with a species mix like that of the existing forest along the river. The dominant, canopy trees would be Black cottonwood, Arroyo willow, and Red willow, with occasional alders and Coulter willow. In plantings, cottonwoods and willows should be placed randomly in roughly equal numbers except near the western edge where willows should predominate, and Arroyo and Red willows should be planted in a 2:1 ratio. More shade tolerant and understory species should invade naturally.

Restoration of riparian forest could be accomplished in a number of ways. The minimal approach would involve only levee removal, and allow revegetation to occur naturally. The maximal approach, of the sort commonly required for mitigation projects, would involve development and implementation of a detailed restoration plan intended to restore the riparian forest as rapidly as is feasible. Contract implementation costs for riparian restoration typically range from $15,000 to $25,000 per acre, excluding acquisition and grading costs, although the large size and favorable conditions of this site may allow lower costs. The Department of Parks and Recreation typically uses CCC labor for restoration projects. Assuming that it does so in this case, costs would be about $5,000 per acre, based on the costs of riparian restoration projects implemented by the Nature Conservancy.

A number of intermediate approaches are also feasible, and three kinds of approaches can be distinguished in terms of the source of the new plants. One kind of approach would depend upon the natural seed rain from the existing riparian forest. Cottonwoods and willows have very small seeds that require bare, damp mineral soil for successful germination. Silt deposits from overbank

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flows provide natural seed beds for these trees, but suitable conditions could also be provided by appropriately timed cultivation and irrigation. Young plants could also be thinned and irrigated for a few years until they establish adequate root systems.

The approach has several advantages. Planting costs would be avoided, and the new plants would be of appropriate, locally adapted stock. However, there area also disadvantages. The species composition of the natural seedlings would be uncontrolled, and large areas of a single species could occur. Wild mustard is a common weed in the fields, and might shade out the seedling trees unless it were controlled.

Nursery seedlings offer the advantage that species composition and plant spacing can be dictated, and with proper planning and work with nursery operators it should be possible to obtain large numbers of locally derived plants at relatively low cost, that could be planted with standard agricultural transplanting equipment. Competition from weeds might still be a severe problem, requiring careful cultivation.

Cuttings would probably require less cultivation and irrigation, and could be planted at lower density, partially compensating for higher initial planting costs. However, planting 115 acres at 15 foot spacing would require 22,500 cuttings. If these were to be locally obtained (in the lower Carmel Valley), the harvest of cuttings would probably have to be spaced over several years. Additionally, alders cannot easily be propagated by cuttings.

The total cost of restoring the 115 acre site would vary dramatically, depending on the level of effort. At $15,000 per acre, the implementation cost of the typical mitigation approach would be over $1.6 million! Even at $5,000 per acre, the cost would be $575,000. These costs makes a more gradual and experimental approach seem appropriate, unless CALTRANS needs to finance a conventional project as mitigation for riparian vegetation that would be displaced by the Hatton Canyon Freeway.

4. Evaluation:

Riparian forest is now recognized as having high environmental value, especially in areas of dry or Mediterranean climates where it creates "deciduous islands in an evergreen sea." Little of California's original riparian forests remains. According to the CDFG biologists, riparian vegetation near the coast is of particular importance for migrating passerine birds. This project would create a riparian forest large enough to be of regional importance.

Riparian forest would allow substantial flood flow on the left overbank, although not as much as

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an excavated flood by-pass channel. However, by reducing the velocity of flood flows on the south overbank, the forest would reduce the risk of major erosion or a shift of the river channel during floods.

The proposed riparian restoration would displace coastal agriculture, which also merits protection. However, it is not clear that continued agricultural use of the area would be feasible after the levee were removed. On balance, riparian forest is the preferred use.

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ACCESS SUGGESTIONS

Present Conditions

At present, there is public access to the Carmel River lagoon from both north and south. A parking lot north of the river mouth off Scenic Drive provides the main access to the Carmel River Beach. This lot is closed from dusk to dawn, although the beach itself is open until 10 pm. A maintenance access road runs along the coastal terrace south of the river mouth, connecting Highway 1 near Bay School and Calle de la Cruz, a cul-de-sac in the Carmel Meadows subdivision. This, together with a pedestrian trail along the bluff south of the lagoon, provides access from the south. The southern access is not publicized, and is used mainly by local residents. Birders often approach the area from the east, along the river itself.

An access road connects the wastewater treatment plant with Highway 1. The pipeline to the effluent outfall crosses the artichoke fields, and the present agricultural use allows adequate emergency access to the pipeline.

Access Objectives

Wildlife habitat should be given priority over human access. Subject to that constraint, paths and trails through the study area should:

1. Allow walking a loop around the lagoon and wetland, when the river mouth is closed;
2. Allow bicycling from Carmel to Monastery Beach without going on Highway 1 or crossing the Carmel River beach;
3. Connect with other existing or proposed paths, such as the Monterey Bay Shoreline Trail.
4. Allow birding and nature walks at the new wetland and in the new riparian forest.

Access Suggestions

The Carmel Area Wastewater District will need to maintain access along the route of its outfall pipe, which runs across the western end of the artichoke fields from the treatment plant to the crossing over the South Arm. This, together with the road from the treatment plant to the highway, can form the basis for bicycle paths through the project area. The new paths should be similar to the existing access road along the terrace south of the river, i.e. unsurfaced or surfaced with decomposed granite, and could be used by pedestrians as well as bicyclists. To complete the bicycle and pedestrian paths, three additional links should be considered.

1. A bicycle and pedestrian bridge could cross the South Arm, over or adjacent to the outfall pipe, to connect the path with the existing maintenance access road that runs from Calle de la Cruz to

Bay School.

2. A bicycle and pedestrian path could leave the outfall maintenance road at the western edge of the treatment plan, skirt the plant, and cross the river to join paths being developed in Rio Park. If a bridge were built, this would allow passage across the lower end of Carmel Valley in all but the wettest periods, when the outfall maintenance road of the river would be flooded by overland flow. Without a permanent bridge, passage would be seasonal, but a low, temporary bridge would allow passage from perhaps May until the beginning of the flow season.

3. A bicycle and pedestrian path could leave the plant access road and pass under the Highway 1 bridge, to join paths that may be developed east of the highway. There could be access to Highway 1 along the plant access road.

Additional pedestrian paths should also be considered:

4. A loop trail through the new riparian forest, passing by the northern margin of the new wetland.

5. A trail on the hillside above the new South Arm and wetland. Although it remains in open space, the hillside is in private ownership. However, if access across this land becomes available, a trail could be built overlooking the enlarged south arm and new wetland, connecting with the existing maintenance access road south of the lagoon to the west, and with the new riparian forest loop trail to the east.

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Bicycle and Pedestrian

Pedestrian Only

N

Suggested Bicycle and Pedestrian Paths

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FIGURE
10-1

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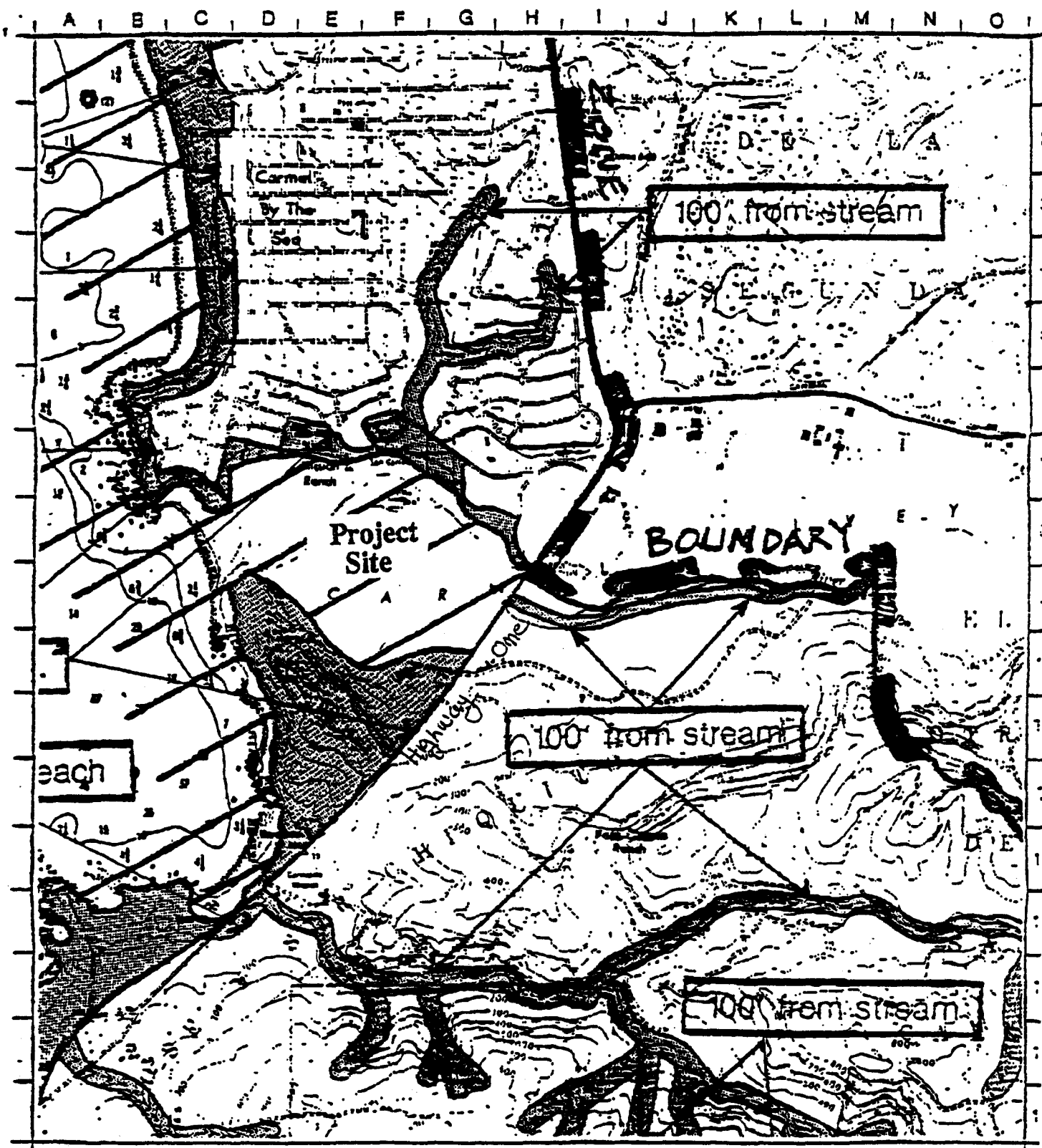

County of Monterey **Exhibit H: Coastal Commission Jurisdiction Map (cross-hatched area)**

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