

Healthy Aquatic Habitat Team: - Project Charter for Phase-1

Name of the Phase 1 Project: Defining Healthy Aquatic Habitat (HAH), HAH Assessment, and HAH Protection

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Project Sponsor: Harvey Packard

Project Background:

The vision of the Central Coast Water Board is "Healthy Watersheds." Central Coast Water Board staff developed three measurable goals to achieve the vision. The first measurable goal addresses aquatic habitat, the second addresses land stewardship, and the third addresses groundwater. This Project Charter addresses Measurable Goal-1, which is: **By 2025, 80% of the aquatic habitat is healthy and the remaining 20% exhibits positive trends in key parameters.**

Protection and enhancement of aquatic habitat is important to the Central Coast Region because our Basin Plan identifies several beneficial uses related to the health of aquatic habitats. In order to protect these beneficial uses and sustain healthy watersheds, we must protect existing healthy aquatic habitats and restore those impacted by human actions.

The Water Boards have historically protected water quality through regulation of discharges. However, health of aquatic habitat is not alone protected by the regulation of constituents. Specifically, riparian, channel, hydraulics, hydrology, and other stream and land conditions play crucial roles in the health of aquatic habitat; these conditions do not receive the same level of regulation, relative to discharges. A watershed-level perspective is needed to protect wetlands and riparian areas and their associated water quality functions.

Staff concludes that aquatic habitat is not adequately protected in some waters of the region. Therefore, beneficial uses are not being protected in some aquatic habitats. Staff do not know the full extent of the problem, but region-wide research and professional judgment leads staff to conclude that localized unhealthy aquatic habitat occurs throughout the Region. This conclusion is based upon monitoring data from the Central Coast Ambient Monitoring Program, information/data prompting Clean Water Act 303(d) listings for aquatic habitat related stressors, Reports of Waste Discharge for waste ponds near streams or floodplains, and field observations by staff. Aquatic habitat health has diminished, also, due to lack of consistent stream management policies, municipal practices, and construction activities permitted by federal and state agencies. Stressors and constituents affecting aquatic habitat include (but are not limited to) toxicity, poor flow conditions, biostimulation, elevated thermal regimes, lack of riparian vegetation, hydromodification, and altered stream substrate. As population is forecasted to increase in the Central Coast Region, degradation of aquatic habitat would be expected if changes are not made to the status quo.

Problem/Opportunity Statement:

In order to protect and enhance healthy aquatic habitat, staff must consider improving enforcement of existing regulations, implementing new regulations and/or other management approaches, and exploring improved opportunities for intra-agency/interagency coordination.

In order to measure progress towards achieving Measurable Goal-1, staff must develop a definition of healthy aquatic habitat, such as, a healthy aquatic habitat is one that is protective of aquatic habitat-related beneficial uses, whether or not those beneficial uses are explicitly described in the current basin plan (40CFR131.3).

Healthy aquatic habitat is difficult to define and assess across the broad spectrum of surface water types and habitats of the Central Coast Region. Aquatic habitat related beneficial uses, which help define healthy aquatic habitat, may be present but are not always protected in all surface waters of the Region. The regulatory mechanisms needed to achieve healthy aquatic habitat may reach beyond regulation of discharges, which has been the historic emphasis of the work at the Water Board.

Opportunities for enhancing, protecting, and restoring water quality, beyond that of Measurable Goal-1, may also result from completing the work proposed in this Charter. Programs, such as Ambient Monitoring, TMDL, Site Cleanup Program, Storm Water, Non-Point Source, and Water Quality Certifications, will likely benefit from developing aquatic habitat assessments.

Project Objective Statement (POS):

The Healthy Aquatic Habitat Team (HAH Team) will work on five tasks. While completing the five tasks, the HAH Team will work with Vision Teams working on the other two measurable goals in order to ensure an agency-wide coordinated product. The following tasks will be completed in HAH Phase-1:

1) Early Implementation:

Although the definition and assessment of healthy aquatic habitat has not been developed, a healthy aquatic habitat has basic requirements of which staff is well aware. With this awareness, Central Coast Water Board staff can seize opportunities now to protect and enhance healthy aquatic habitat. Examples of opportunities include:

- Review and comment on CEQA documents calling out the importance/protection of riparian corridor portions and other planning approaches that proactively protect aquatic habitat. Follow up on our comment with the proposed project and push our recommendations to the maximum extent.
- Scan city and county board meeting agendas for projects that could affect aquatic habitat. In an effort to protect aquatic habitat, attempt to push the level of our influence further than we have in the past (which may not be backed

regulatory) when we feel it's necessary. This may mean assigning staff to evening hours to attend local meetings.

- Officially and publicly support projects that protect existing healthy aquatic habitats (including riparian areas). For example, greenbelts and reserves.
- Work with local permitting jurisdictions to improve implementation of LID and Hydromodification principles in planning and project development.
- Request input from local jurisdictions on how we might better support their efforts to protect riparian corridors and improve other early stakeholder outreach.
- Streamline staff assignments to free up resources to implement this Charter and seize opportunities for protecting/enhancing healthy aquatic habitat now.
- Conduct thorough assessments of pollutant sources in Watershed Assessment Projects, and identifying certain suspect sources as contributors to impairment of aquatic habitat, even if direct evidence is not available.
- Use TMDLs to implement measures that protect and enhance healthy aquatic habitats to levels that may not be clearly justified scientifically, but we believe is professionally reasonable.
- Proactively protect aquatic habitat, not reactively.
- Keep a living list of healthy aquatic habitat stressors as staff becomes aware of them.

2) Define Healthy Aquatic Habitat:

The HAH Team will develop a definition of healthy aquatic habitat that is founded on beneficial use protection (not limited to those currently identified in the Basin Plan) assessable characteristics, and regulatory authority. The size and features of vegetative buffer zones (undeveloped areas directly adjacent to water bodies) will be an integral part of the HAH definition.

3) Develop assessment method:

The HAH Team will work with the Assessment Team to develop an assessment method for aquatic habitat on a regional basis. The resulting assessment method will, at least in part, measure existing and potential water quality objectives; assessment of water quality objectives will facilitate the use of regulatory and administrative action.

4) Identify and develop implementation and management actions needed to protect, enhance and restore aquatic habitat:

For the actions, develop operational performance measures (examples of operational measures include: # of permits issued with new requirements; # of new development projects conditioned and implemented with LID; # of municipal policies and standards adopted that insure 30 feet or greater setbacks from riparian corridor, identify conditions or individual streams that require greater than 30 feet).

5) Identify and develop regulatory and administrative tools:

The HAH Team will identify (and if needed, propose) regulatory and administrative tools to control and influence conditions that enhance and stress aquatic habitat. Examples include permitting, regulatory standards, policy, and recommended water quality criteria. The HAH Team anticipates completion of Phase-1 in six to eight months after the Project Charter is implemented, provided adequate resources are provided for staff to complete these steps. Following Phase-1, adopt new regulations and implement new management approaches or administration tools.

Project Stakeholders:

The following stakeholder list represents a draft list of known internal, and likely external, stakeholders. The complete stakeholder list will encompass hundreds of individuals reaching over a spectrum of the public.

Lead Internal Stakeholders:

Stakeholder (entity)	Function
HAH Team members	HAH Project Development and Implementation
Sustainable Land Management Team members	SLM Project Development and Implementation coordinated with HAH Project Development
Groundwater Team	GW Project Development and Implementation coordinated with HAH Project Development
Vision Assessment Team	VA Project Development and Implementation coordinated with HAH Project Development
Central Coast Water Board staff	Interested and implementing parties
Bruce Ho	R1R2 Riparian and Wetland Protection Project
Bill Orme	State Board Riparian and Wetland Protection efforts
Greg Gearhart and Eric Bernsten	State-Wide Hydromodification Workgroup https://share.epanet.ca.gov/Emerging/SWRCB/Hydromod/

Key External Stakeholders: External stakeholders will be contacted for Tasks 3-5 and in later Phases. The following list represents an incomplete list of likely stakeholders.

Stakeholder (entity)	Function
Existing IPLs: 401 Certification Program, Point Source, NPS, TMDL, and Site Cleanup IPLs, (contain city/county planning departments and more likely stakeholders)	Environmental advocates, research groups, regulated entities (municipal and private), governmental entities, RCDs.

Responsible parties	Potential and known responsible parties list will be developed (e.g., landowners and operators, dischargers, developers, entities) that are affecting aquatic habitat.
Support Stakeholders: Interested Central Coast Region residents and NGOs	Comment and implement measures to achieve the goal.

Assumptions, Constraints, and Issues:

Description of known assumptions and constraints, including expected completion time and resource limitations, which may directly affect the project.

Assumptions: Assumptions were considered factors in Project Objective Statement that were considered to be true, real, or certain.

The complexities of healthy aquatic habitat can be captured in a definition and assessment that, in turn, can be applied to the varied surface water types occurring in the Central Coast Region.

Staff and non-staff human resources necessary to carry out HAH Phase-1 are available and will continue to be available. This is particularly necessary since HAH Phase-1 may include the first few months of fiscal year 2008-2009.

The four Vision Teams are interdependent and success of the measurable goals for each Vision Team relies on the cooperation and success of other Vision Team. The HAH Team and other Vision Teams projects depend on successfully securing the capacity, expertise and information anticipated to measure progress for all three Measurable Goals. For example, the HAH and Assessment Vision Teams will collaborate to develop multi-parameter indices (e.g. measures of toxicity, riparian habitat, bioassessment, biostimulation, and water chemistry) that will be used as surrogate measures for aquatic habitat health. The HAH Team and Assessment Team have responsibility for each others success, and this project assumes the success criteria in the Vision Assessment Project will be met.

Constraints: Constraints are known or suspected factors limiting the HAH Team's options for successfully completing the Project Objective Statement.

The conditions for healthy aquatic habitat are not entirely consistent among surface water types; available assessment methods may not be sensitive enough to fully assess health for all surface water types.

The HAH Team was not certain whether existing Water Board regulatory authority and administrative tools are enough to achieve Measurable Goal-1. Consequently, there

could be a steep learning curve during this task of the project objective.

The dilemma inherent in resource utilization and beneficial use preservation may need to be managed.

Expenditures for hardware and software may be necessary during Phase-1; as identified in the Vision Assessment Team charter there are limited resources available.

Issues: Significant items, facts, and situations that could cause the project objective to fail.

Lack of assessment resources, expenditures for data collection which are vital to the project objective.

Lack of staff resources and knowledge/skill to apply large amounts of data to the assessment is vital not only now during Phase-1, but during implementation phases for years to come.

Related/Dependent Projects:

Dependent Projects:

Project	Nature of Dependency
Sustainable Land Management (SLM)	Sustainable land management includes riparian areas and is a necessary component of the SLM goal, as well as a necessary component of healthy aquatic habitat. Therefore, dependency insofar as our authority to achieve sustainable land management goal SLM goal exists or can be developed.
Groundwater	Dependency insofar as good stewardship of ground water resources is necessary for base flow, which in turn is necessary for healthy aquatic habitat. Additionally, pollutants from groundwater may enter surface water and impact aquatic habitats. Inversely, HAH provides high quality ground water infiltration, which supports Measurable Goal-3.
Assessment Team	The Assessment Team will play a vital role in the assessment of HAH. Success of Phase-1 depends on collaboration with the Assessment Team and the success of the assessment efforts.

Related Projects:

Project:	Nature of Relation
Basin Planning-Standards	HAH staff may need to revise aquatic life related beneficial uses and objectives HAH staff may consider development of tiered uses.
401 and CEQA Review	In some cases, Water Board staff participation in local agency planning and comments provided through CEQA and environmental document review may be the most effective method to implement regulatory authority. Water Board staff resources will need to be aligned to provide our input to planning actions and review of environmental documents.
CCAMP/TMDL	The assessment method developed (Task-2 of Project Objectives Statement) could help inform 303(d) listing and TMDL assessment methods. Likewise, knowledge gained from CCAMP and TMDL data and analysis can inform the HAH and Assessment Teams of potential assessment tools.
Enforcement	Internal knowledge regarding enforcement options may help formulate regulatory and administrative options (Task-5, Project Objective Statement).
Incident/ Complaint Tracking	The complaint and incident tracking tools developed could improve staff's response to protecting aquatic habitats, and tracking and awareness of incidents/complaints.

Critical Success Factors:

Critical success factors are agreements, behaviors, resources, etc., that are vital to the success of the project.

- 1) Projection remains a priority in the office.
- 2) Resource, staff and other, availability through Phase-1.
- 3) Staff charged with implementing Phase-1 has the knowledge base to carry out the tasks. Identify staff and knowledge/skill for data assessment and implementation and plan for proper deployment.
- 4) Identify assessment resources, and plan for proper deployment for data collection and analyses.
- 5) Identify HAH conditions associated with various surface water types.
- 6) Recognize the balance needed between utilization and preservation and identify areas where compromises will still maintain HAH.

DEFINITIONS:

Aquatic Habitat: Provides the beneficial services of wetlands and riparian areas for people and wildlife in protecting and improving water quality, providing fish and wildlife habitat including unique plant communities (i.e., wetland and riparian vegetation), storing floodwaters, maintaining surface water flows in dry periods, and other valuable functions.

Aquatic habitats include ponds, lakes, rivers, streams, creeks, springs, estuaries, bays, and various types of wetlands. These can be classified as:

- non-flowing waters like lakes and ponds
- slowly-flowing waters like marshes and swamps
- flowing waters like creeks, rivers and streams
- moist soil and lush vegetation along stream banks (called riparian areas)

Beneficial Uses:

Beneficial uses for surface and ground waters are divided into the twenty standard categories. Those applicable to HAH are:

Ground Water Recharge (GWR)

Uses of water for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers. Ground water recharge includes recharge of surface water underflow.

Freshwater Replenishment (FRSH)

Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity) which includes a water body that supplies water to a different type of water body, such as, streams that supply reservoirs and lakes, or estuaries; or reservoirs and lakes that supply streams. This includes only immediate upstream water bodies and not their tributaries.

Warm Fresh Water Habitat (WARM)

Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

Cold Fresh Water Habitat (COLD)

Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

Inland Saline Water Habitat (SAL)

Uses of water that support inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates. Soda Lake is a saline habitat typical of desert lakes in inland sinks.

Estuarine Habitat (EST)

Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine

mammals, waterfowl, shorebirds). An estuary is generally described as a semi-enclosed body of water having a free connection with the open sea, at least part of the year and within which the seawater is diluted at least seasonally with fresh water drained from the land. Included are water bodies which would naturally fit the definition if not controlled by tidegates or other such devices.

Marine Habitat (MAR)

Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

Wildlife Habitat (WILD)

Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

Preservation of Biological Habitats of Special Significance (BIOL)

Uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural resources requires special protection.

Rare, Threatened, or Endangered Species (RARE)

Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

Migration of Aquatic Organisms (MIGR)

Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.

Spawning, Reproduction, and/or Early Development (SPWN)

Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.


Areas of Special Biological Significance (ASBS)

Coastal and nearshore areas designated by the State Water Resources Control Board as requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable.

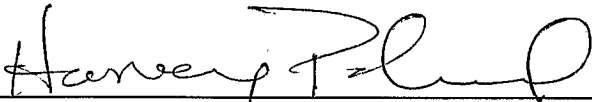
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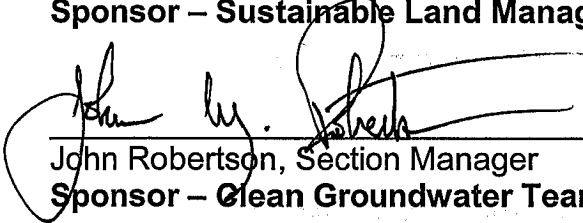
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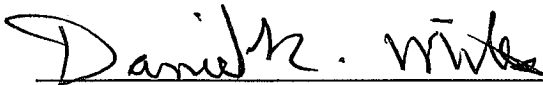
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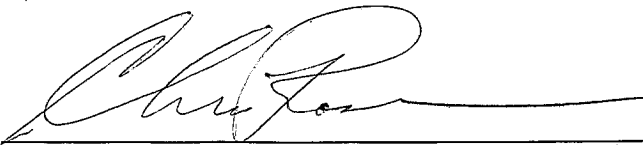
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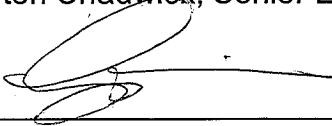
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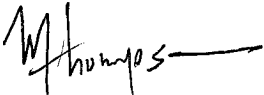
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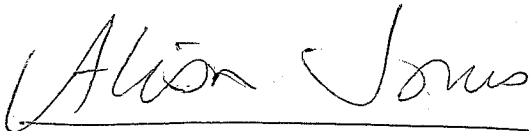
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