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Filed:	1/8/15
180th day:	7/7/15
Staff:	M. Kraemer-A
Staff Report:	3/27/15
Hearing Date:	4/17/15

STAFF REPORT: REGULAR CALENDAR

Application No.:	**1-11-023**
Applicant:	**Northcoast Regional Land Trust**
Location:	Along Freshwater Slough, on the north side of Myrtle Avenue, approximately two miles northeast of Eureka, Humboldt County (APNs 402-291-15 & 402-241-09).
Project Description:	Install various public access improvements including parking, a nature trail, and a boat launching access point for kayaks and canoes.
Staff Recommendation:	Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

The Northcoast Regional Land Trust (NRLT, Applicant) proposes to install various public access improvements to its approximately 74-acre property known as Freshwater Farms Reserve. The property currently is managed by the NRLT for cattle grazing, fish and wildlife habitat, and educational field outings. The property is located along Freshwater Slough, a major tributary to Humboldt Bay, approximately two miles northeast of Eureka.

In 2009, under CDP 1-08-012 approved by the Commission on October 17, 2008, the NRLT restored approximately 35 acres of tidelands plus additional freshwater off-channel salmonid rearing habitat along Wood Creek, which flanks the southern end of the property.

The proposed project involves the development of a number of elements intended to facilitate and enhance public access to, and public education about, an important Humboldt Bay tributary complex. Proposed improvements include improved parking, a nature-study trail including a boardwalk, viewing platform, and boat launching access point, and interpretive signage.

Staff believes that the proposed 183 square feet of wetland fill associated with the development is inherently for the purpose of nature study, a use consistent with Section 30233(a)(7) of the Coastal Act, and is the least environmentally damaging feasible alternative. The NRLT proposes to mitigate for the project's wetland fill impacts by restoring a small segment (approximately 50 square feet) of palustrine emergent wetlands near the proposed parking area and by enhancing approximately 500 feet of riparian habitat along Freshwater Slough as described in Finding IV-D below. Staff believes the proposed mitigation provides feasible and appropriate mitigation to minimize the project's wetland habitat impacts.

As conditioned to require submittal of a final wetland mitigation and monitoring plan and to address water quality concerns, staff recommends **approval** of CDP application 1-11-023, as conditioned. The motion to adopt the staff recommendation is on page 4.

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I. MOTION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve coastal development permit 1-11-023 pursuant to the staff recommendation.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**: The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration**: If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable amount of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation**: Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment**: The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. Terms and Conditions Run with the Land: These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. State Lands Commission Review. PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the Applicant shall submit to the Executive Director a written determination from the State Lands Commission that (a) no state or public trust lands are involved in the development; or (b) state or public trust lands are involved in the development and all permits required by the State Lands Commission have been obtained; or (c) state or public trust lands may be involved in the development, but pending a final determination, an agreement has been made with the State Lands Commission for the project to proceed without prejudice to that determination.

2. Final Wetland Mitigation and Monitoring Plan.

A. PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the Applicant shall submit, for the review and approval of the Executive Director, a final revised wetland mitigation and monitoring plan that substantially conforms with the plans dated 6/23/14 titled "Mitigation Plan for Freshwater Nature Trail Improvement Project" prepared by the NRLT, as revised and supplemented by additional plans dated 2/17/15 and a supplemental email received 2/19/15, except that the final plans shall be revised to include the following:

i. Submittal of final plans for each mitigation site, including the following: (a) planting plans and schedule; (b) weeding plans and schedule; (c) monitoring, reporting, and remediation plans consistent with the requirements herein;

ii. Provisions for submittal of initial as-builts within 30 days of completion of the initial mitigation/restoration work;

iii. Monitoring and maintenance plans for each wetland mitigation site, including the following: (a) a schedule; (b) interim performance standards; (c) a minimum 5-year monitoring period; (d) provisions for submittal of annual reports of monitoring results to the Executive Director for the duration of the required monitoring period, beginning the first year after submittal of the "as-built" report. Each report shall document the condition of the restoration with photographs taken from the same fixed points in the same directions. Each report shall also include a "Performance Evaluation" section where information and results from the monitoring program are used to evaluate the status of the restoration project in relation to the interim performance standards and final success criteria specified below; (e) final success criteria for the palustrine emergent wetland mitigation area including, at a minimum, plant species diversity and native vegetative cover similar to adjacent undisturbed vegetation; and (f) final success criteria for the riparian vegetation mitigation including, at a minimum, a survival rate of at least 80% for each species planted.

iv. Provisions for the submittal of a final monitoring report to the Executive Director at the end of the five-year reporting period. The final report must evaluate whether the

restoration site(s) conforms to the goals, objectives, and performance standards set forth in the approved final restoration program. If the final report indicates that the mitigation project has been unsuccessful, in part, or in whole, based on the approved final success criteria, the Permittee shall submit a revised or supplemental mitigation program to compensate for those portions of the original program which did not meet the approved performance standards. The revised program shall be processed as an amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

B. The Permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

3. Construction BMPs. The Permittee shall comply with the following construction-related Best Management Practices (BMPs):

A. No construction materials, debris, or waste shall be placed or stored where it may be subject to entering coastal waters or wetlands;

B. Construction activities shall occur during periods of dry weather only, and, for project construction that occurs within or adjacent to tidal wetlands and waters, during periods of low tides only. If rainfall is forecast after construction has commenced and before construction is complete, any exposed soil areas shall be promptly mulched with weed-free straw or covered with sheeting and secured with sand bagging or other appropriate materials before the onset of precipitation. Adequate and effective erosion and sediment control measures shall be used to prevent sediment-laden water from entering coastal waters and wetlands.

C. To minimize wildlife entanglement and plastic debris pollution, the use of temporary rolled erosion and sediment control products with plastic netting (such as polypropylene, nylon, polyethylene, polyester, or other synthetic fibers used in fiber rolls, erosion control blankets, and mulch control netting) is prohibited. Any erosion-control associated netting shall be made of natural fibers and constructed in a loose-weave design with movable joints between the horizontal and vertical twines;

D. Excess soil, vegetative spoils, and any other debris, waste, and other excess material generated by the authorized work shall be shall be lawfully disposed of outside of the coastal zone at an authorized disposal site capable of receiving such materials within 10 days of project completion. Side casting or placing any construction debris, soils, vegetative spoils, or any other debris or waste within any wetland or environmentally sensitive habitat area is prohibited;

E. If treated wood is permitted to be used for the boardwalk and viewing platform, the following additional BMPs shall be implemented: (i) whenever possible, cutting or drilling of treated wood shall occur at least 100 feet away from coastal waters and wetlands, and any sawdust, drill shavings, and wood scraps shall be contained and collected in order to prevent the discharge of treated wood to the marine environment; and (ii) treated wood materials shall be stored during construction in a contained, covered area to minimize exposure to precipitation.

4. **Assumption of Risk, Waiver of Liability and Indemnity Agreement.** By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from flooding, erosion, and earth movement; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. PROPOSED PROJECT AND ENVIRONMENTAL SETTING

The Northcoast Regional Land Trust (NRLT, Applicant) proposes to install various public access improvements to its approximately 74-acre property known as Freshwater Farms Reserve. The property currently is managed by the NRLT for cattle grazing, fish and wildlife habitat, and educational field outings. The property is located along Freshwater Slough, a major tributary to Humboldt Bay, approximately two miles northeast of Eureka (Exhibits 1-2).

Historically (prior to the construction of the Northwestern Pacific Railroad and Highway 101 beginning over 100 years ago), the project site occupied the upper zone of tidal marshland surrounding the perimeter of Humboldt Bay and its tidal mudflats. Humboldt Bay supported nearly 10,000 acres of intertidal coastal marsh, the majority of which was diked and drained for agricultural use beginning in the late 19th-century. The subject property was cut off from the greater Freshwater Slough system by a wooden flap tide gate and a levee, preventing tidal influence on the property for many decades. The NRLT purchased 54 acres of the property in 2005 with the intent of restoring tidelands and off-channel rearing habitat for coho salmon and other threatened and endangered fish species. In 2009, under CDP 1-08-012 approved by the Commission on October 17, 2008[1], the NRLT restored approximately 35 acres of tidelands plus additional freshwater off-channel salmonid rearing habitat along Wood Creek, which flanks the southern end of the property. In 2012 the NRLT purchased the adjacent (to the east) 20 acres of land, which was developed with a historic dairy barn and a former native plant nursery known as Freshwater Farms.

Education is a core part of the NRLT's mission. The land trust periodically hosts school and public field trips on the subject property to educate the community on wetland ecology, restoration, and productive, multiple-use land management (approximately 20 acres of the property is leased for cattle grazing). However, the property currently has no public access amenities such as picnic tables, trail markers, protective barriers near waterways, surfacing

[1] The staff report is available at this link: http://documents.coastal.ca.gov/reports/2008/10/F7b-10-2008.pdf

materials, or signage. The proposed project involves the development of a number of elements intended to facilitate and enhance public access to, and public education about, an important Humboldt Bay tributary complex. The proposed development includes the following (and see Exhibit 3):

Parking. Proposed improvements to an existing approximately 11,250-square-foot gravel parking area include (1) grading and placing crushed Class 2 base rock up to 8-inches deep over approximately 9,500 square feet, (2) paving one ADA parking stall adjacent to the proposed nature trail, (3) installing parking bumpers for up to nine regular parking spaces, (4) installing signage related to parking, hours of use, and an informational kiosk, and (5) installing a bike rack, trash receptacle, and other minor amenities.

Trail. The Applicant proposes to improve an approximately ¾-mile-long public access nature study trail that would extend from the proposed parking area along the northern perimeter of the property adjacent to Freshwater Slough out to the tide gate near the confluence of Wood Creek and Freshwater Slough. The first approximately 400-foot-long section of the trail extending from the parking area towards the existing barn would include 4-ft-wide compacted shale surfacing placed on existing uplands. The remaining approximately 3.500 feet of trail length would not require any surfacing material, as it already is a well-defined vegetated path that receives regular mowing during the growing season. The project includes extending a short non-surfaced spur trail down to Freshwater Slough to an improved boat launching access point (described below). The Applicant would install trail way markers and interpretive signage relating to the natural, cultural, and agricultural resources on the property at various locations throughout the trail corridor.

Boat launching access point. The Applicant would install approximately 150 square feet of Geoblock® material (a series of interlocking polyethylene units) across a small topographic bench along the shoreline embankment of Freshwater Slough to provide a stable ground surface for launching small boats. The access would serve kayakers, canoeists, and other boaters able to carry their boats out to that point, including participants in periodic nature-study oriented boating outings organized by the NRLT. The proposed Geoblock® would allow native vegetation to grow up through the cells, thereby reducing proposed wetland fill impacts.

Boardwalk and viewing platform. A proposed elevated boardwalk would be installed that would extend south from the main trail for about 50 feet out to an elevated viewing platform above the previously restored tidal marsh habitat. The boardwalk would be approximately 4 feet wide by 50 feet in length, and the viewing platform approximately 8 feet long by 6 feet wide (approximately 50 square feet in size). Both the boardwalk and platform would be elevated approximately 4 feet above the ground surface using redwood or pressure-treated posts secured into the ground with cement using post and pier construction. The viewing platform would include rail-mounted interpretive panels presenting information on the native flora and fauna of the marsh and restoration efforts on the property.

Trail terminus safety barrier. The Applicant proposes to install an approximately 4.5-foot-high safety barrier at the end of the trail, which terminates at an old concrete tide gate flume. The barrier would be composed of wooden posts and barbless wire with a solid wooden top rail.

Interpretive signage. A variety of signs and trail markers would be installed throughout the project area, from the parking lot to the tide gate overlook and boating access point. Approximately five interpretive panels composed of high pressure laminate would either be rail mounted (as discussed above) or on angled pedestals. All panels would be approximately 36" x 24" in size or smaller. The signs would inform visitors of the area's natural and cultural history, biological resources, and restoration efforts.

Mitigation. The land trust proposes to mitigate for the project's wetland fill impacts by restoring a small segment (approximately 50 square feet) of palustrine emergent wetlands near the proposed parking area and by enhancing the riparian habitat along Freshwater Slough as described in Finding IV-D below.

B. STANDARD OF REVIEW

The proposed project is located in the Commission's retained jurisdiction. Humboldt County has a certified local coastal program (LCP), but the site is within an area shown on State Lands Commission maps over which the state retains a public trust interest. Therefore, the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

C. OTHER AGENCY APPROVALS

Humboldt County. The County approved the project under Conditional Use Permit 11-008 on December 18, 2014.

California Department of Fish and Wildlife. The Department issued Lake and Streambed Alteration Agreement No. 1600-2011-0163-R1 for the proposed boating access improvements on January 30, 2012.

North Coast Regional Water Quality Control Board. Pursuant to Section 401 of the Clean Water Act and/or Porter-Cologne Water Quality Control Act authority, the Board is processing WDID 1B3038WNHU for the proposed project. The certification is expected to be issued in late March or early April of 2015.

U.S. Army Corps of Engineers. The Applicant obtained Clean Water Act Section 404 authorization from the Corps for the proposed project under Nationwide Permit 18 (Minor Discharges) (NWP 18 No. 2011-0000-14N).

State Lands Commission. The project site entails areas which were submerged, intertidal and/or overflow lands at the time of California's statehood in 1850. Notwithstanding that approximately half the site currently is not subject to tidal inundation, the site remains subject to public trust oversight by the State Lands Commission. To assure that no aspect of the project would be inconsistent with the public trust limitations as may continue to be applied to the site, the Commission attaches **Special Condition 1**, which requires the applicant to submit, prior to permit issuance, evidence that the State Lands Commission has reviewed the approved

development proposal and determined what if any permits or other grants of authority may be required before the project work may commence.

D. WETLANDS AND WATER QUALITY

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30233 of the Coastal Act provides, in applicable part, as follows:

> *(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) Nature study, aquaculture, or similar resource dependent activities*
>
> …
>
> *(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…*
>
> …

The Applicant proposes to place a total of 33 square feet of fill material (piers and posts) within coastal wetlands (brackish marsh) for the construction of the proposed boardwalk and viewing platform, which will be elevated approximately four feet above the wetland habitat. In addition, the project includes the placement of approximately 150 square feet of Geoblock® along the shoreline embankment of Freshwater Slough within palustrine emergent to brackish marsh habitat above the high tide line for soil-stabilization purposes to create a stable boat launching access point for kayaks, canoes, and other small craft for periodic nature-study oriented boating outings organized by the land trust.

The above-cited Coastal Act policies set forth a number of different limitations on what development projects may be allowed in coastal wetlands. For analysis purposes, the limitations can be grouped into four general categories or tests, which, in combination, must demonstrate the following: (1) that the purpose of any proposed filling, diking, or dredging is for one of the seven uses allowed under Section 30233(a); (2) that the project has no feasible less environmentally damaging alternative; (3) that feasible mitigation measures have been provided to minimize adverse environmental effects; and (4) that the biological productivity and functional capacity of the habitat shall be maintained and enhanced where feasible. Each is discussed below.

Allowable use. The first test set forth above is that any proposed filling, diking, or dredging in wetlands must be for an allowable purpose as specified under Section 30233 of the Coastal Act. The relevant category of use listed under Section 30233(a) that relates to the proposed project is subcategory (7), *nature study…or similar resource dependent activities*. The Commission has considered the development of new recreational trail segments through wetlands and other environmentally sensitive resource areas to be a form of "nature study… or similar resource dependent activities" in cases where design efforts have been made to minimize such intrusions to the smallest feasible area or least impacting routes, and where the trail segment functions as a nature trail [e.g., see findings for LCP Amendment Nos. STB-MAJ-3-02 (Toro Canyon Planning Area), HUM-MAJ-1-03 (Riparian Corridor Trails) and CDP Nos. 3-11-074 (City of Santa Cruz, Arana Gulch Master Plan) and 1-11-037 (City of Eureka, Elk River Access Area/Hiksari′ Trail Project)].

"Nature study" is formally defined as, *the study of animals and plants in the natural world, usually at an elementary level*.[2] In her treatise on the importance of fostering a conservation ethic in children through environmental education starting at an early age, the renowned natural science educator Anna Botsford Comstock characterizes "nature study" as follows:

> *It consists of simple, truthful observations that may like beads on a string, finally be threaded upon the understanding and thus held together as a logical and harmonious whole… In nature study, the work begins with any plant or creature which chances to interest the pupil. It begins with the robin that comes back to us in March promising spring; or it begins with the maple leaf which flutters to the ground in all the beauty of its autumnal tints. A course in biological science leads to the comprehension of all kinds of life on our globe. Nature study is for the comprehension of the individual life of the bird, insect, or plant that is nearest at hand.*[3] [Emphases added.]

By providing venues for incidental exploration of the physical and biological world, trails in natural settings generally are recognized as one of the best ways to ensure continued public support for protecting environmentally significant natural areas and to encourage an appropriate level of visitation. This perspective is at the core of the many public outreach and grant-funding efforts undertaken by natural resource conservation-oriented public agencies and other non-government organizations, from the Coastal Conservancy to many of the numerous land trusts

[2] *Webster's Revised Unabridged Dictionary*, C. & G. Merriam Company, 1913.
[3] Anna Botsford Comstock, *Handbook of Nature Study*, Comstock Publishing Associates, Inc., 1939

involved in public access acquisition and development (including the NRLT). Regardless of their age, people in general are more likely to develop a stewardship ethic toward the natural environment if they are educated about the importance of the overall ecosystem, especially if provided the opportunity to experience the physical, mental and spiritual benefits of these areas first-hand. Providing for the development of trails into the outer fringes of marshes and wetlands can be an ideal setting for such activities, as they offer a safe, convenient and unique perspective of the rich and diverse biological resources associated with watercourses, estuaries, and the natural coastline.

The proposed trail improvements within wetland areas, including the footings for the boardwalk and viewing platform within the marsh and the surface stabilization material along the slough bank for educational boating outings, are limited to nature study use. As discussed above in the Project Description section, education is a core part of the NRLT's mission, and the land trust periodically hosts school and public field trips on the property to educate the community on wetland ecology, restoration, and the natural resources of Freshwater Slough and Wood Creek. The proposed boardwalk and viewing platform, which will extend into the outer margin of tidal habitat, will include rail-mounted interpretive panels on the native flora and fauna of the marsh and the NRLT's restoration efforts on the property. The portion of the trail extending down to Freshwater Slough for boating access is limited to a location where development of the trail will help channel and direct public boating access away from other potential access points along the slough that currently are undisturbed and which support habitat for a rare brackish marsh plant species (Lyngbye's sedge, *Carex lyngbyei*), thereby helping to maintain the biological productivity and quality of the slough habitat over the long-term while facilitating educational boating outings lead by the NRLT. The proposed public access improvements include a variety of interpretive signage from the parking lot to the tide gate overlook to the boating access point and viewing platforms, which will inform visitors of the area's natural and cultural history, biological resources, and restoration efforts.

Thus, the proposed development within coastal wetlands is a form of "*nature study… or similar resource-dependent activities,*" as it is: (1) a development type integral to the appreciation and comprehension of biophysical elements that comprise wetland areas; and (2) dependent upon the presence of the natural area resource through which the trails pass to provide a nature study experience. As such, the Commission finds that the proposed wetland fill is inherently for the purpose of nature study, a use consistent with Section 30233(a) of the Coastal Act.

Alternatives. The second test set forth by the Commission's dredging and fill policies is that the proposed project must have no less environmentally damaging feasible alternative. Coastal Act Section 30108 defines "feasible" as …c*apable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors*. In this case, alternatives to extending the proposed trail into coastal wetlands for the proposed nature-study boardwalk, viewing platform, and boat launching access point include the no-project alternative, the use of alternative trail configurations, and the use of alternative materials.

No project alternative. The no project alternative means that no boardwalk, viewing platform, and boat launching access point would be developed through a small segment of marsh habitat.

Under this alternative, the NRLT would not meet its objective of educating the public about the property's natural resources as a means of ensuring continued public support for protecting environmentally significant natural areas and to encourage an appropriate level of visitation. Furthermore, without the proposed trail development through the relatively small area of wetlands, the ability to conduct and pursue nature study, especially of the tidal channels and slough habitats, would continue to be limited. There would be no improved boat launching access point to the slough at an appropriate location as proposed, which avoids rare plant habitat that is present elsewhere on the property along the slough. Thus, this alternative would not help to maintain the biological productivity and quality of the slough habitat over the long-term while facilitating educational boating outings lead by the land trust. Moreover, access to the slough for launching small boats without the proposed improvements would continue to require difficult maneuvering down steep, slippery slopes that likely would serve as a disincentive for many to use this segment of the trail and continue to expose pedestrians and boaters to significant trail use safety issues. Therefore, the no project option is not a less environmentally damaging feasible alternative than the proposed project as conditioned.

Alternative configurations. The boardwalk through the marsh habitat to the viewing platform is designed as a straight spur that extends from the existing levee along Freshwater Slough for about 50 feet out through restored tidal marsh habitat. The straight alignment of the boardwalk from the closest bank minimizes its length and its associated fill in the tidal marsh. The boardwalk and viewing platform will be built on 23 piers with wooden posts elevating the boardwalk platform about 4 feet above the marsh habitat. Fewer piers and posts, and therefore less wetland fill, would be needed if the viewing platform were located closer to the bank and the boardwalk were to be shorter than proposed. However, the boardwalk and viewing platform are designed to allow visitors to experience the rich and diverse biological resources associated with the estuarine environment, including both tidal marsh and tidal channels. The proposed viewing platform at the end of the boardwalk trail is sited to provide a direct view of the tidal channel within the restored tidal marsh closest to the main trail on the levee. In addition, extension of the boardwalk into the marsh will allow visitors to stand out of the path of travel along the main trail to enjoy the nature study experience. In this case, the Commission finds that the proposed length of the boardwalk and viewing platform strikes a reasonable balance between allowing adequate utility for nature study while avoiding excessive additional wetland filling that could lead to more pronounced and significant levels of disruption and fragmentation of the habitat values of the area.

As discussed above, the proposed small craft boat launching access point is sited along a natural gently sloping bench leading down to the channel of Freshwater Slough and configured to avoid rare plant habitat, which is present elsewhere on the property along the slough channel.

Therefore, the use of alternative boardwalk, viewing platform, and boating access configurations is not a less environmentally damaging feasible alternative to the proposed development as conditioned.

Alternative materials. A final alternative to the project as proposed involves the use of alternative materials for the boardwalk, viewing platform, and boat launching access point. The proposed boardwalk and viewing platform will be elevated above the marsh habitat by about 4 feet, which

is high enough to allow light access beneath the trail. Shading impacts will further be minimized by leaving one-inch spacing between decking boards of both the boardwalk and the viewing platform. Other types of materials and designs that could be used for this purpose, such as solid material placed closer to or directly on the marsh, would involve more wetland fill and would be more environmentally damaging. The boat launching access point will be constructed of Geoblock®, a material that allows for the growth of vegetation up through the material cells, thereby reducing fill impacts compared to other types of solid surfacing material, such as crushed shale. Therefore, use of alternative materials is not a less environmentally damaging feasible alternative to the proposed development as conditioned.

For all of the reasons discussed above, the Commission finds that there is no feasible less environmentally damaging alternative to the development as conditioned, as required by Section 30233(a).

Feasible Mitigation Measures. The third test set forth by Section 30233 is whether feasible mitigation measures have been provided to minimize adverse environmental impacts. The proposed development would be located in part within and around coastal wetlands. Depending on the manner in which the proposed project is conducted, the significant adverse impacts of the project on wetlands may include a loss of wetland habitat from proposed impacts to approximately 183 square feet of coastal wetlands, and water quality impacts from the use of treated wood in the marine environment and the discharge of sediment, debris, and waste from construction activities. The potential impacts and their mitigation are discussed below.

Mitigation for wetland fill impacts. To mitigate the loss of wetlands from the proposed wetland fill and to further mitigate for any loss of wetland habitat and function that the project may have, the NRLT proposes to restore and enhance wetlands onsite/out-of-kind at a ratio of approximately 3.7 to 1 (wetlands restored/enhanced to wetlands impacted). This includes a proposal to restore 50 square feet of palustrine emergent wetlands to compensate for the 33 square feet of brackish marsh fill impacts associated with the boardwalk and viewing platform and to plant a minimum of 500 lineal feet of riparian vegetation (50-70 woody riparian specimens to be planted on 10-foot centers) to mitigate for the 150 square feet of Geoblock® brackish and freshwater wetland fill associated with the boat launching access point along Freshwater Slough. The proposed palustrine emergent wetlands will be restored on the southern end of the property near the proposed parking area by excavating an area of historic fill material down to the level of adjacent existing palustrine emergent wetlands and then planting the excavated area with native plants. The land trust also will install native plants and fencing or signage along the edge of the parking lot as appropriate to prevent human intrusion into the proposed wetland restoration area. The proposed riparian vegetation will be planted along shoreline areas of Freshwater Slough on the property that currently lack riparian cover. The land trust will use regionally appropriate native riparian plants, such as alders and willows, with approximately 10 feet of spacing between individual plantings.

The Commission finds that given the relatively small area affected, the relatively fast-growing nature of willows and alders, the likelihood of success of the wetland restoration through the removal of fill in historic wetlands and the planting of native species, and the lack of multi-stratum complexity of the resource area involved, the proposed out-of-kind palustrine emergent

wetland restoration and riparian vegetation enhancement along the slough to mitigate for brackish and freshwater wetland impacts is feasible and adequate mitigation for the proposed wetland fill impacts.

To further ensure that the wetland impacts of the development will be successfully mitigated, the Commission attaches **Special Condition 2**, which requires that prior to issuance of the CDP, the NRLT must submit a final revised wetland mitigation and monitoring plan for the Executive Director's review and approval. The final revised plan shall include provisions for submittal of final planting plans, weeding plans, and monitoring and reporting plans. The final plan must include final success criteria for plant species diversity and native vegetative cover at each of the mitigation sites, and it shall include provisions for the submittal of a final monitoring report. If the final monitoring report indicates that the mitigation project is unsuccessful, the land trust is required to submit a revised or supplemental mitigation program to compensate for those portions of the original program which did not meet the approved performance standards in the form of an amendment to the permit.

Therefore, the Commission finds that the project as conditioned provides feasible mitigation measures to minimize the project's wetland habitat impacts consistent with Section 30233 of the Coastal Act.

Water quality protection. The proposed boardwalk, viewing platform, and boating access improvements will be constructed within and adjacent to coastal wetlands associated with Freshwater Slough and Humboldt Bay. For the boardwalk and viewing platform, the NRLT proposes to use redwood and/or pressure treated materials, and the boat access will use Geoblock® surfacing. The use of pressure-treated wood in this setting (brackish marsh) could lead to the leaching of contaminants into the marine environment, as discussed below. Additional water quality impacts also could occur during construction of the trail amenities if appropriate protective measures and best management practices (BMPs) are not undertaken.

Chromated copper arsenate (CCA), ammoniacal copper zinc arsenate (ACZA), and ammoniacal copper arsenate (ACA) are pressure-treated wood preservatives derived from metal compounds and arsenic. The toxic properties of these metal-arsenate compounds preserve the wood from decay fungi, wood-attacking insects (including termites), and marine borers. These chemicals can have adverse environmental impacts when used where they can leach into the aquatic environment. Alternative arsenic-free treated wood preservatives include alkaline copper quaternary (ACQ) and copper azole (CA, CA-B, and CA-C), which are copper-based treatments. ACQ and CA prevent decay from fungi and insects and are registered for use in freshwater and marine environments. However, copper can pose a risk of aquatic toxicity even in small concentrations, and copper is regulated by the State of California as a Persistent and Bioaccumulative Toxic Substance.

The Commission attaches **Special Condition 3-E** to require the implementation of additional BMPs during construction if treated wood is used for the boardwalk and viewing platform. These BMPs include requirements for cutting/drilling treated wood at least 100 feet away from coastal waters and wetlands, containment/collection of any sawdust, drill shavings, and wood scraps in

order to prevent the discharge of treated wood to the marine environment, and storing treated wood materials in a contained, covered area to minimize exposure to precipitation.

To further protect water quality from construction-related impacts, **Special Condition 3** also requires adherence to various construction-related responsibilities so that no construction materials, debris, or waste shall be allowed to enter coastal waters or be placed where it may be washed by rainfall or runoff into coastal waters.

Therefore, the Commission finds that the project as conditioned provides feasible mitigation measures to minimize the project's potential water quality impacts consistent with Section 30233 of the Coastal Act.

Maintaining and Enhancing Functional Capacity. The fourth general limitation set by Sections 30233 and 30231 is that any proposed dredging or filling in coastal wetlands must maintain and enhance the biological productivity and functional capacity of the habitat, where feasible. Section 30233(c) states that the diking, filling, or dredging of wetlands shall maintain or enhance the functional capacity of the wetland. Sections 30230 and 30231 state that marine resources shall be maintained, enhanced, and where feasible, restored. Sections 30230 and 30231 also state that the biological productivity of coastal waters appropriate to maintain optimum populations of all species of marine organisms and protect human health shall be maintained and, where feasible, restored.

As discussed in the above Findings, the conditions of the permit will ensure that the project will not have significant adverse impacts on water quality or surrounding habitats and will ensure that the project construction will not adversely affect the biological productivity and functional capacity coastal waters or wetlands. Therefore, the Commission finds that the project, as conditioned, will maintain and enhance the biological productivity and functional capacity of the habitat maintain and restore optimum populations of marine organisms and protect human health consistent with the requirements of Sections 30230, 30231, and 30233 of the Coastal Act.

Conclusion. The wetland fill associated with the project is for one of the allowable uses for filling enumerated in Coastal Act Section 30233(a). Furthermore, there are no less environmentally damaging feasible alternatives available to further reduce or avoid the filling of wetlands and water quality impacts. Moreover, as proposed and augmented by the attachment of additional special conditions to the permit's approval, all feasible mitigation measures have been provided to minimize the environmental impacts of the proposed fill and maintain and enhance, where feasible, the biological productivity and quality of coastal waters. Therefore, the Commission finds the project to be consistent with Sections 30230, 30231, and 30233(a) of the Coastal Act.

E. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

Section 30240 of the Coastal Act states, in applicable part, as follows:

> *(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.*

Section 30107.5 of the Coastal Act defines "environmentally sensitive area" as follows:

> *'Environmentally sensitive area' means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in the ecosystem and which could be easily disturbed or degraded by human activities and developments.*

As discussed above, the project proposes various public access amenities, including parking, nature trails, viewing platforms, and picnic tables, in areas immediately adjacent to freshwater and tidal wetlands. The freshwater wetlands on the property, which are diked former tidelands, are located around the proposed parking area and around certain sections of the proposed nature trail. The tidal wetlands on the property are located around the proposed boardwalk, viewing platform, boat launching access point, and around certain segments of the proposed nature trail (i.e., the western end of the trail along the levee out to its terminus at the tide gate). In addition, the proposed boat launching access improvements are located immediately adjacent to Freshwater Slough, which supports habitat for sensitive fish species including Chinook salmon, coho salmon, steelhead, and others.

Special Condition 3 requires adherence to various construction-related responsibilities to protect adjacent wetlands and ESHA, including requirements that (1) no construction materials, debris, or waste be placed or stored where it may be subject to entering coastal waters or wetlands, (2) excess soil, vegetative spoils, and other excess material generated by construction be appropriately disposed, and (3) prohibit the use of erosion and sediment control products with plastic netting to minimize the potential for wildlife entanglement and plastic debris pollution.

Therefore, the Commission finds that the proposed project, as conditioned, will be sited and designed to prevent impacts which would significantly degrade adjacent ESHA and will be compatible with the continuance of the adjacent ESHA, consistent with Section 30240(b) of the Coastal Act.

F. PUBLIC ACCESS

In the authorizing of new development within the coastal zone, the public access policies within Chapter 3, Article 2 of the Coastal Act set forth a series of requirements for the protection, accommodation, and provision of coastal access. These policies direct that maximum access be provided, subject to certain limitations, especially with regard to the protection of public health and safety and environmental resources.

Section 30210 of the Coastal Act requires that maximum public access shall be provided consistent with public safety needs and the need to protect natural resource areas from overuse. Section 30212 of the Coastal Act requires that access from the nearest public roadway to the shoreline be provided in new development projects, except where it is inconsistent with public safety, military security, or protection of fragile coastal resources, or where adequate access exists nearby. Section 30211 of the Coastal Act requires that development not interfere with the public's right to access gained by use or legislative authorization. Section 30214 of the Coastal

Act provides that the public access policies of the Coastal Act shall be implemented in a manner that takes into account the capacity of the site and the fragility of natural resources in the area. In applying Sections 30210, 30211, 30212, and 30214, the Commission is also limited by the need to show that any denial of a permit application based on these sections or any decision to grant a permit subject to special conditions requiring public access is necessary to avoid or offset a project's adverse impact on existing or potential access.

The proposed development, which involves various public access improvements on the subject property, is consistent with and implements the requirements of Coastal Act Sections 30210, 30212, and 30214. The project maximizes public access and recreational opportunities consistent with Sections 30210 and 30212, and, by limiting access to pedestrians for nature-study hiking and boating use, the project as conditioned protects natural resources consistent with Sections 30210 and 30214. Therefore, the Commission finds that the project as proposed will not have any significant adverse effect on public access and is consistent with the requirements of Coastal Act Sections 30210, 30211, and 30212.

G. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Humboldt County served as the lead agency for the project for CEQA purposes. The County adopted a final mitigated negative declaration of environmental impact (MND) for the project on September 4, 2008 and an addendum to the previously adopted MND on December 18, 2014.

Section 13906 of the Commission's administrative regulation requires Coastal Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, is consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits approval of a proposed development if there are any feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to be consistent with the policies of the Coastal Act. As specifically discussed in these above findings, which are hereby incorporated by reference, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A
SUBSTANTIVE FILE DOCUMENTS

Coastal Development Permit Application Materials

- Application file for CDP Application No. 1-11-023

Reports and Permits

- Humboldt County Staff Report for Conditional Use Permit No. 11-0008 approved by Humboldt County on 12/18/14
- CEQA document (mitigated negative declaration) adopted 9/4/08 by Humboldt County with addendum adopted on 12/18/14.
- CDFW SAA No. 1600-2011-0163-R1
- NCRWQCB WDID No. 1B3038WNHU
- USACE NWP 18 No. 2011-0000-14N

Websites

- Humboldt County Planning and Building Dept. GIS Portal: http://gis.co.humboldt.ca.us/Freeance/Client/PublicAccess1/index.html?appconfig=podgis4
- RealQuest – Real Estate Data and Information: http://www.realquest.com/jsp/rq.jsp?action=switch&page=main
- California Coastal Records Project: http://www.californiacoastline.org/

LCP

- County of Humboldt Local Coastal Program

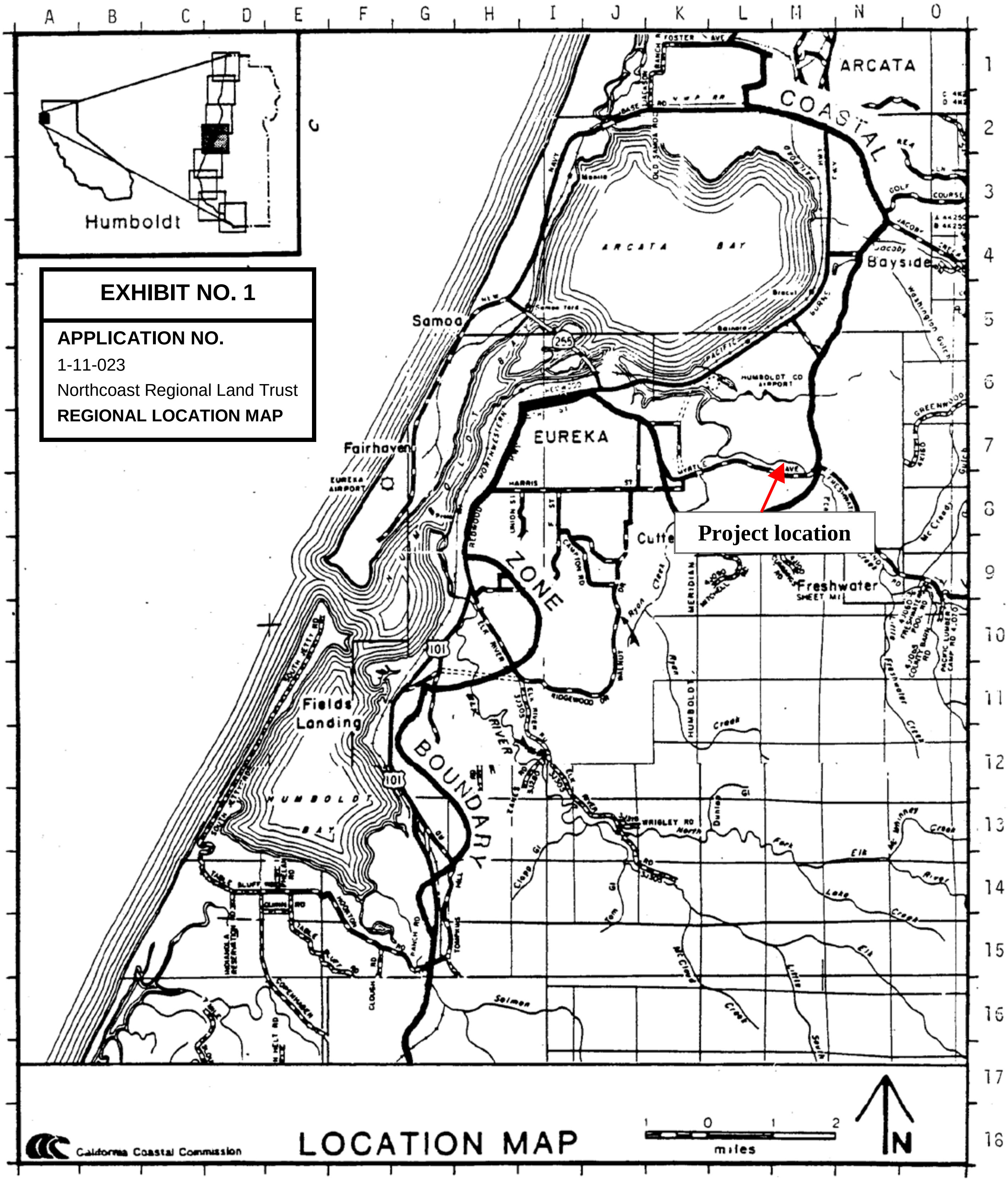
EXHIBIT NO. 1

APPLICATION NO.

1-11-023

Northcoast Regional Land Trust

REGIONAL LOCATION MAP



County of Humboldt

EXHIBIT N0. 2
APPLICATION NO.
1-11-023
Northcoast Regional Land Trust
VICINITY MAP

EXHIBIT N0. 3
APPLICATION NO.
1-11-023
Northcoast Regional Land Trust
SITE PLAN
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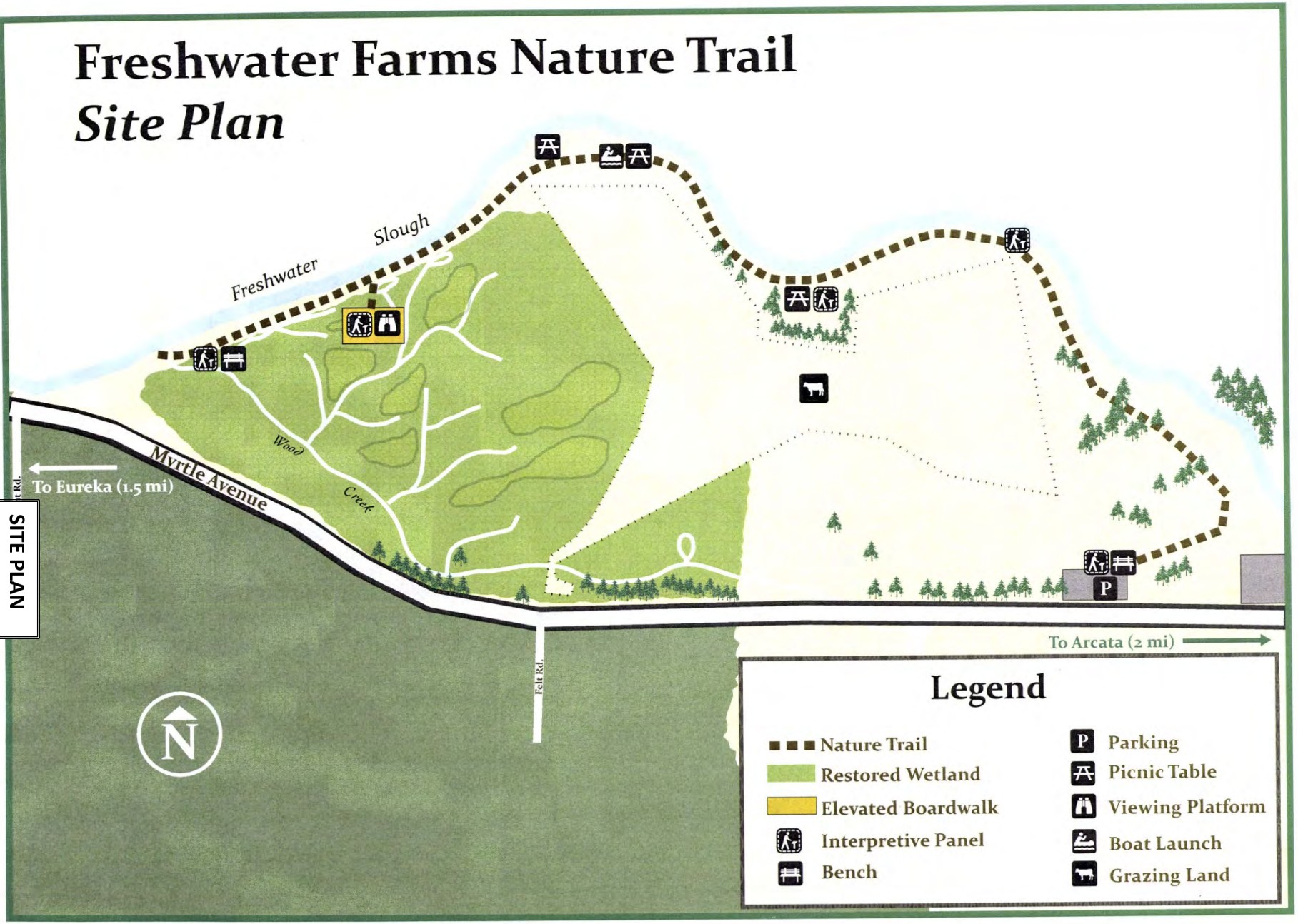
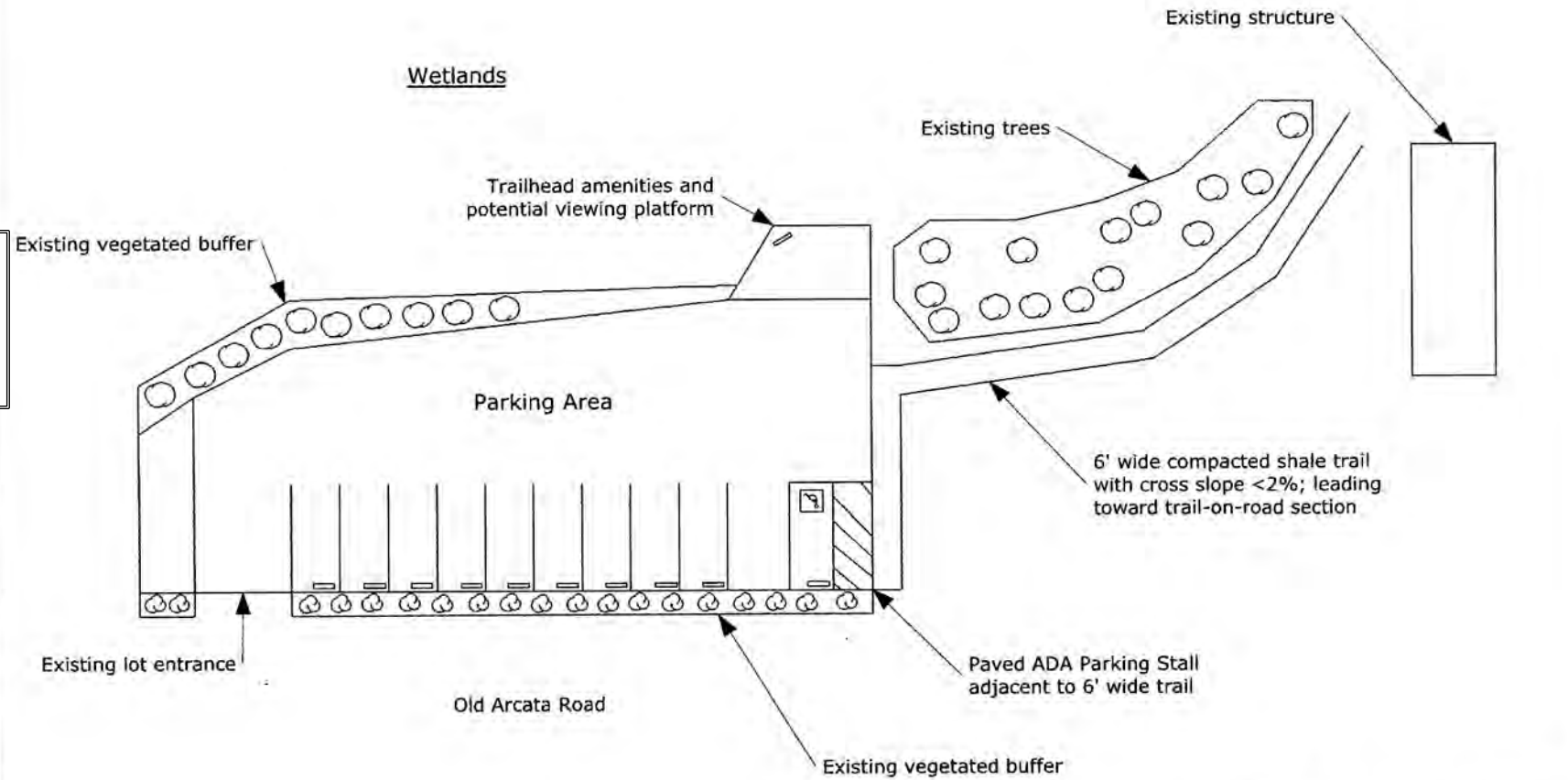
Freshwater Farms Nature Trail

Site Plan



FRESHWATER FARMS NATURE TRAIL: Revised Parking Plan



SITE PLAN
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