

Recreation California State Parks) <sup>1</sup>. All hiking trails will be earthen except where ADA accessibility is a priority. Widths of trails will vary, depending on site conditions. As a general standard, hiking trails will be 3- to 6-foot-wide, 8-feet high overstory, all-season accessible, on native soils. Detailed discussions of improvements to specific hiking trails appear below.

All casual trails throughout the area will be decommissioned and re-vegetated with native plants and/or brushed with vegetative materials, including the trail which leads north from the caretaker's residence site, the trails that branch off from designated forest trails in Ma-le'l North and Ma-le'l South, and particularly those trails that lead through areas populated by reindeer lichen.

Hiking trail improvement work in the forest and dunes will avoid impacts to sensitive and special species populations such as coral root orchid (*Corallorhiza*), sugar stick (*Allotropia virgata*), and other unusual or rare plant occurrences and animal or insects sites such as ant, bee and wasp nests. Prior to trail work, USFWS will provide locations of these species so that they may be adequately protected.

There may be an opportunity in the future to connect Ma-le'l Dunes Trail System to additional public use areas to the south. Separate environmental analyses will be conducted if this opportunity arises.

## Trail Names

In keeping with the primary interpretive theme of the Ma-le'l Dunes CMA project area (discussed further in Section 4.5.2), the Wiyot Tribe was asked to provide suggestions for trail names in the Wiyot language. A list of words suggested by the Tribe appears in Appendix B. Names were selected with pronunciation and relevance to the site in mind. The Cultural Resource Specialist for the Wiyot Tribe should be consulted regarding the final selection and spelling of the proposed trail names prior to their use on signs or in publications. A brief explanation of Wiyot pronunciation should be included in the publications where the trail map occurs.

## Ma-le'l South

### *Equestrian Trail - Latkak Trail*

In August 2004, BLM delineated an equestrian and hiking trail through the foredunes of Ma-le'l South. This existing route provides equestrian access to the Ma-le'l Dunes CMA and will be called the Latkak Trail, which means "sand" in the Wiyot language.

<sup>1</sup> Available from North Coast Redwoods Headquarters, 600-A West Clark, Eureka, CA 95501, Telephone: (707) 445-6547

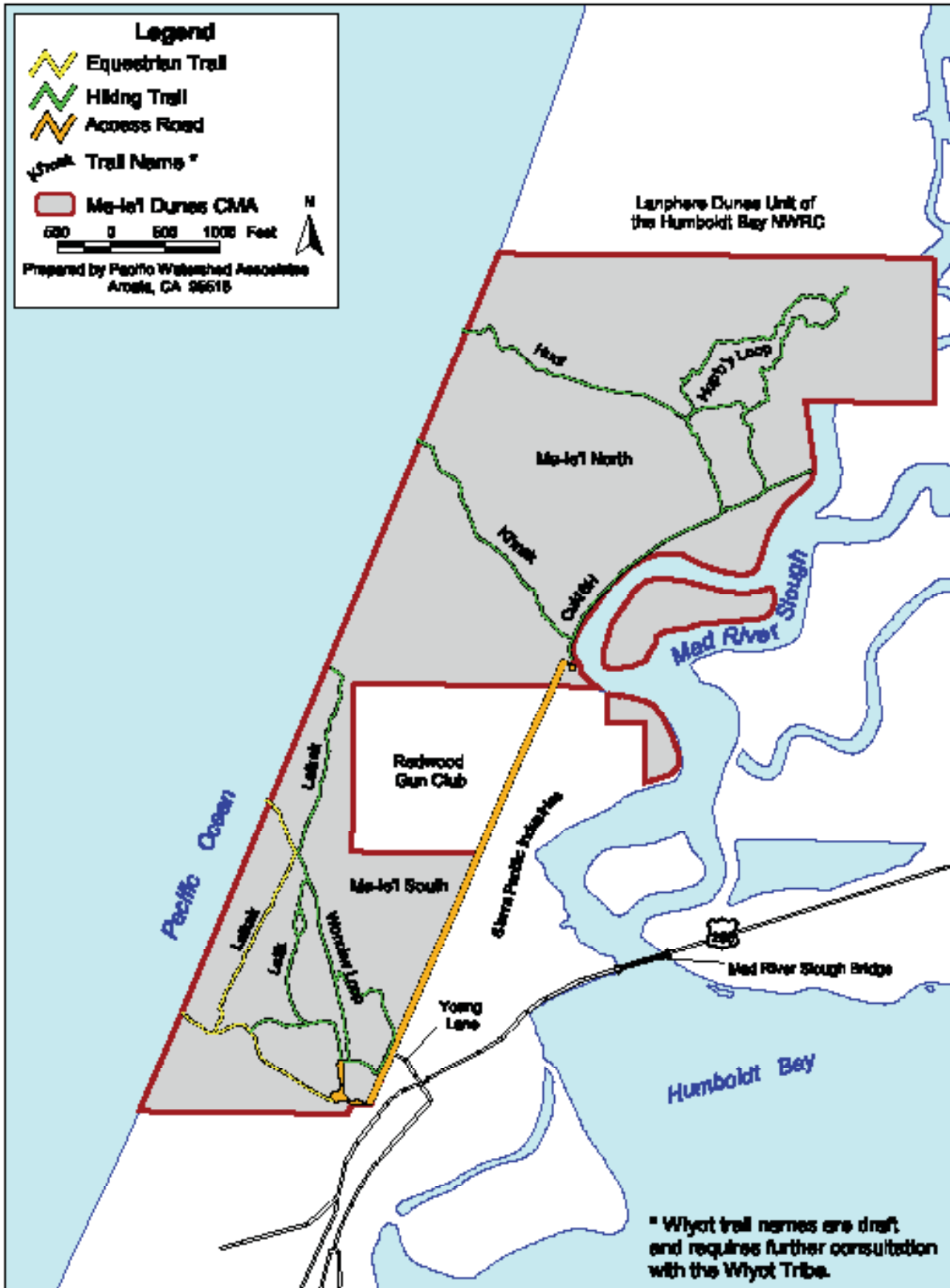


Figure 4-4. Trail Route Map

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The equestrian trail begins at the south side of the Ma-le'l South parking area and heads west through the dunes. At the foredune the trail veers north, following the east side of the foredune and the HBMWD underground pipeline. The trail contains two beach access points. Not including the waveslope, the Latkak Trail is approximately one mile in length. The equestrian trail will be maintained with various widths up to 8-feet wide.

### *Hiking Trails*

#### *Latkak Trail*

A new extension of the existing Latkak Trail will provide additional beach access from Ma-le'l South. The trail extends through the nearshore dunes north of where the Latkak currently turns towards the beach and traverses over the primary dune to the beach strand. Visitors can access the Ma-le'l North trails by using this route and then walking along the beach approximately one-quarter mile north.

#### *Wonokw Trail*

An existing hiking trail that leads visitors through the forest and dune loop with access to the beach was delineated by BLM in August 2004 (USDI-BLM, 2004). This forest-dune loop will be known as the Wonokw Trail, which means "spruce tree" in Wiyot.

From the Ma-le'l South parking lot, visitors will exit the east side of the parking area by foot, cross a dune using an existing path to Ma-le'l Road, then walk a short distance to the forest trailhead along a pedestrian safety corridor. From this location, which is adjacent to the PG & E power tower, the Wonokw Trail traverses forested dunes, descends open dunes, passes an intersection with the Letik Trail (discussed below) and then joins the Latkak Trail to the beach. In the future, BLM may develop a spur that will follow a forested ridge from the middle of the Wonokw trail to the Ma-le'l South parking lot.

The Wonokw Trail will be repaired or improved in the following ways:

- The 100-foot section of stair and rail trail will be replaced.
- A 30-foot section of boardwalk will be installed over a seasonally muddy section of trail.
- Where feasible, the forest trail will be re-routed to avoid damage to trees roots and to minimize potential erosion. Existing casual trails, especially those prone to erosion, will be decommissioned by revegetation or natural barriers.
- A pedestrian safety corridor will consist of a physical barrier, such as bollards along the west side of the road. The bollards will be placed to

avoid visual conflict with the Ma-le'l Dunes CMA entry sign.

### *Letik Trail*

The Letik Trail, meaning "sunshine" in Wiyot, departs the northern end of the Ma-le'l South parking and leads hikers through an old access gate and a series of nearshore dunes to join the Wonokw Trail and Latkak trail to the beach beyond.

## **Ma-le'l North**

### *Hiking Trails*

The existing railroad berm and forest trails in conjunction with two new hiking routes will provide two new beach access points offering a 2.5 mile hiking loop.

### *Cukish Trail*

The existing railroad berm trail, will be known as the Cukish Trail, meaning "bird" in Wiyot. It extends 2,800 feet north from the Ma-le'l North Parking Area along the Mad River Slough to the dilapidated rail road trestle. It serves as the entry route to a forest loop and beach access trails throughout Ma-le'l North. Improvements along this trail will include:

- Preliminary upgrade which will include trail clearing and grubbing to a 3' minimum width, and an 8' overstory clearance.
- ADA accessibility upgrade (discussed below).
- Installation of "bio-engineered" erosion control measures to protect the berm and the installation of benches and a wetland view deck (discussed below).

### ADA Accessibility

To accommodate ADA accessibility, along the Cukish Trail, typical design requirements will be based on CalDAG 2000 and should include:

- 48-inches minimum trail width, which may be reduced to 36-inches in areas where significant site disruption would otherwise occur.
- Minimum 60 inches x 60 inches passing/rest area at minimum 200 feet apart, or two rest areas for every 400 feet.
- Hard surfaces such as asphalt, natural emulsion pavement or concrete.
- Trail gradients maximum running slope 5 % and cross gradient 2% .
- One ADA accessible parking space should be provided at trail parking lot.
- Maintain 36-inch clearance between gates or bollards.

Asphalt is a suitable surfacing material. However, if budget allows a natural



Pedestrian trail from Ma-le'l South parking area to Ma-le'l Road.

emulsion pavement (e.g. Resinpave™) is a preferable surfacing material due to its low environmental impact and natural color. These high strength products are made of renewable resources, suitable for all weather and climate conditions, and can be applied at ambient temperatures.

It is very important that all paving be installed on suitable subgrade that meets at minimum the following typical specifications:

- Organic material on the existing trail and in areas to be expanded shall be removed and the existing trail base will be widened to six feet.
- Following compaction of the graded and widened subgrade, geotextile fabric is to be installed.
- Following geotextile fabric installation, a minimum of 0.4 feet of 5/8 inches minus crushed rock fractured all sides shall be installed in newly excavated areas and compacted to a 90 % compaction using a mechanical roller or compactor.

Asphalt and/or natural emulsion pavement will be installed as per the manufacturer's specifications. It is important to note that the trail surface installation, erosion control and associated structures could be achieved with increased efficiency if the trail can be accessed by heavy equipment. Some equipment can require clearances of up to 12 feet in height and 9 feet in width plus additional area to maneuver. This could, at least temporarily, impact important aesthetic features of the trail related to the canopy and edge vegetation. Methods and equipment are available that allow for low impact construction in hard-to-reach locations. However, they can add significant cost to a project and are generally logistically challenging. It will be important for the USFWS to manage the design and construction of this trail closely to optimize between cost effectiveness and potential impact.

#### *Erosion Control*

There are many locations along the Cukish Trail where erosion and slumping will need to be addressed with various erosion control measures. Typically this is addressed by back filling these areas with large quarry rock or concrete and/or asphalt construction debris (a.k.a. rip rap). This method is not likely to be ecologically or aesthetically appropriate in this area. A combination of hard armoring, geotextile, fill and native plantings should be adequate to address this problem. Any permanent revetment structure will need to be appropriately engineered to ensure suitability and strength. In order to accomplish this a coastal engineer will be contracted to provide design and specifications for a bioengineered revetment structure. Alternative technologies could include gabbions, willow waddles, sheet piling, cellular confinement, geotextile layering, or a

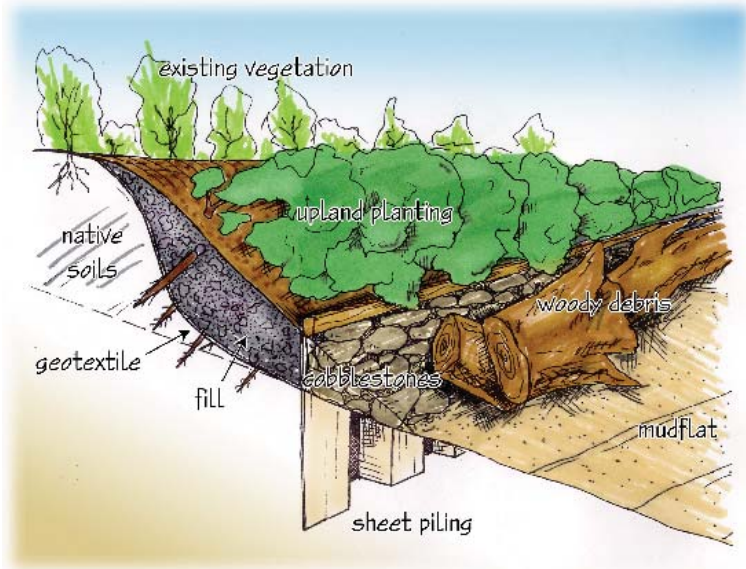


Figure 4-5. Example of Erosion Control Cross-Section

combination of any of these.

### *Ki'mak Trail*

The Ki'mak Trail, meaning whale in Wiyot, is a proposed new trail that will extend from the Cukish Trail up a large dune, past a dune overlook view deck, over open sand and nearshore dunes, to the beach. It passes through the corner of Ma-le'l South/BLM property, a portion of Humboldt Bay wallflower populations, and nearshore dunes densely vegetated with European beachgrass.

The Ki'mak Trail will include the following improvements:

- Cable steps will be installed up the dune towards the dune overlook view deck as per the Trail Handbook (California Department of Recreation, 1990).
- The trail will be marked with trail markers at appropriate sight distances for clear trail delineation, as discussed in the signing section.



Location of proposed cable steps and dune view deck.

### *Hop'o'y Trail*

The Hop'o'y Trail, meaning "berries" in Wiyot, is an existing loop trail through the forest that will extend from the Cukish Trail. Hop'o'y Trail will include the following improvements::

- At the Hop'o'y trailhead steps and rail will be installed to ease access

and eliminate erosion potential.

- Along the Hop'oy Trail approximately 150 feet of steps and rail will be installed to replace a dilapidated wooden staircase.
- In the area where there is a predominance of reindeer lichen (*Cladina portentosa* ssp. *pacifica*), the trail will be re-aligned and delineated with peeler core logs or other natural material to protect this unique and sensitive ecosystem.
- The dilapidated cabins near the meadow in the northern portion of USFWS property will be dismantled and removed.
- The trail that leads to the bank of Iron Creek will be decommissioned in order to eliminate impact to salt marsh vegetation.



Location of Ki'mak Trail across nearshore dunes to the beach.

### *Hudt Trail*

The Hudt Trail, meaning surfish, will be an open dune trail to the beach that extends from the forested Hop'oy Trail. The trail will ascend a large moving dune, then descend to nearshore dunes, and cross a seasonal wetland where it will continue over the primary dune system to the beach. Hikers can return to the forest by following this trail in reverse or by walking south on the beach strand for approximately 1,000 feet to a marked trail that re-enters the foredunes and returns to the Ma-le'l North parking area via the Ki'mak Trail. The set of trails could also be hiked in reverse by starting at the Kimak Trail. The Hudt Trail may include the following improvements:

- A new, less steep forest exit, or forest egress, will be delineated at the Hudt trailhead and cable steps will be installed to enhance access up the dune and out of the forest (For detailed specifications see "Trails Handbook" mentioned above).
- The trail will be marked with trail markers at appropriate sight distances for clear trail delineation, as discussed in the signing section. In particular, a marker will be placed north of the large dune that is visible from the top of the forest dune egress steps.
- A small puncheon-style footbridge will be installed in the foredunes across the seasonal wetland. (For detailed specifications see "Trails Handbook" mentioned at the beginning of this section).



Location of Hudt trail through dune swale to the beach.

## 4.4.6 Trail Amenities

### *Wooden Benches*

The existing wooden benches along the trail will be replaced at the same locations to provide resting places for hikers. The City of Arcata purchases benches from the California Department of Forestry and Fire Protection's (CDF) High Rock Camp (Contact Ken Davis, 707-946-2362).



Location of new forest egress at the Hudt trail head.

### *Wetland View Deck*

At a point approximately 1,200 feet along the Cukish Trail from the trailhead, the existing wetland view deck will be replaced with a structure of similar dimension. Figure 4-6 illustrates the conceptual elevation of the wetland view deck.

The structure will be appropriately engineered to ensure the safety of the user, and will be constructed with the following specifications:

- The deck will have a bench maximum floor clearance of 10 feet x 10 feet, which is the size of the current structure. Minimum floor clearance (5 feet x 5 feet) to accommodate wheelchair access.
- Where appropriate synthetic and/or treated construction materials will be used to reduce the opportunity for decay.
- If possible the portion of the deck that extends out over the wetland will be supported by post piles. If it proves to be infeasible to install piles at this location then a cantilever support system similar to the existing structure will be constructed.
- Work on the view deck will not occur during osprey nesting period, to eliminate impacts to the nearby nesting site.

## 4.4.6 Fencing

### **Fence Removal**

An extensive system of remnant and unused post and wire fencing exists throughout the Ma-le'l Dunes CMA. To improve aesthetics and alleviate tripping hazards, fencing along the following locations will be removed:

#### *Ma-le'l South*

- Wooden post and wire near the previous special events area, along the foredunes of Ma-le'l South, and along the BLM/USFWS property boundary will be removed.
- Wooden posts and wire that exists along the west side of the access road north and south of the caretaker residence on BLM property will be removed.

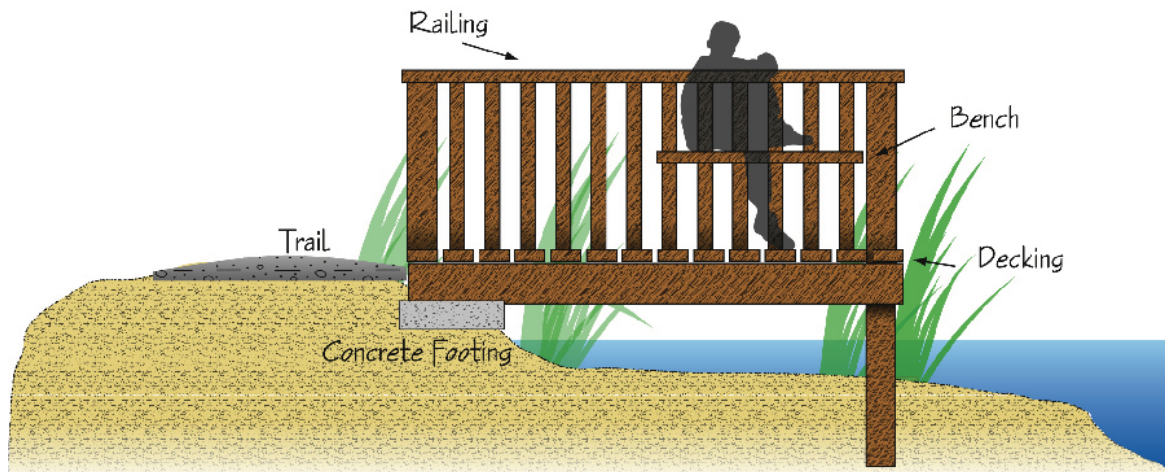


Figure 4-6 Wetland View Deck

### *Ma-le'l North*

- Random post and wire fencing will be removed along the Fernstrom-Root/southern boundary of the property throughout the nearshore dunes, and at the primary dune.

## New and Repaired Fencing

New fencing should be installed only where physical separation is necessary to increase safety, to delineate jurisdictional boundaries, and/or to preserve adjacent landowner privacy. With this in mind, new fencing will be installed at the following locations:

- Along the length of private property boundaries that border the access road. This fence should be approximately 300 feet long, 8 feet high, and made of wood frame and boards. A mixed border of native shrubs such as wax myrtle, flowering currant, and twinberry should be planted on the access road side of the fence. The USFWS access road boundary should be delineated as part of this process.
- Along the 2,000-foot length of SPI property where it borders the access road. This fence should be a live fence, consisting only of native trees, shrubs and including beach pine, sitka spruce, wax myrtle, flowering current, salmonberry, elderberry, thimbleberry and twinberry. The SPI property boundary will be further delineated by boundary signing as discussed in the signing section.
- A gate along the eastern border of the HBMWWD easement and access road intersection should be repaired or replaced.

## Dilapidated Structures and Kiosks

Several structures throughout the area will be demolished and the materials recycled or burned as appropriate. The structures include:

*Ma-le'l South*

- Special group area structures.

*Ma-le'l North*

- Iron Creek structures
- Kiosks located at the forest egress and at the end of the railroad berm
- Entry sign, bike rack, iron ranger



Old post and wire fences lie along the southern boundary of the Fernstrom-Root property in Ma-le'l North.

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## 4.5 Signing, Interpretation, and Information

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An information, interpretation and signing program will enhance access to interpretive information about the natural and cultural features of the area. A successful interpretation program will foster appreciation and understanding, create an enjoyable experience and inspire stewardship for the resources. In addition, an effective interpretive program will help minimize the need for law enforcement by communicating management goals and use regulations. This will be accomplished through publications, programs and a signing plan with clearly identified themes and messages.

### 4.5.1 Signing Plan

#### Objectives

A coordinated signing plan for the Ma-le'l Dunes CMA will provide a consistent look and message for both management agencies within Ma-le'l Dunes CMA. It is recommended that a Ma-le'l Dunes CMA logo be developed and used on appropriate signs. A well-designed logo will effectively communicate to the visitor the joint management while still allowing each agency to incorporate agency-specific signing that informs the visitor about different use levels. A joint logo will include both agency logos as well as a unifying design element, such as a Wiyot basket pattern, indicative of the cultural significance of the area.

#### Guidelines for Development

The development of a signing program will be consistent with the Humboldt Bay Interpretive Signing Manual (2003) developed by the Natural Resources

Division of the RCAA. The Signing Manual outlines the step-by-step process from planning to installation of interpretive wayside signs and welcome signs for public access sites around Humboldt Bay. The manual also provides sign templates depicting the area's natural history including the Mad River Slough and dune habitats. This signing program for the greater Humboldt Bay area is designed to promote attractive, informative and consistent signing made of durable materials and aimed at establishing the bay as an accessible destination for locals and visitors.

Signing guidelines exist for both the BLM and the USFWS. In creating a signing plan for signs on USFWS property, some guidance may be found in the USFWS Signing Manual, and subsequent updates. The USFWS Region 1 Signing Coordinator, (currently Vaugh Ruppert: (503) 872-2702) is available to review custom signing plans for the USFWS portions of the Ma-le'l Dunes CMA. Generally, USFWS has a flexible signing policy that recognizes the differing management needs for individual refuges. USFWS may order signs from the Region 3 Sign Shop by contacting the Region 1 signing coordinator. For signs on the BLM property, the 2001 draft Sign Handbook, chapter 4 addendum of Draft Design Standards should be consulted. BLM signs can be fabricated by the BLM Sign Shop in Rawlins, Wyoming or contracted locally in a manner consistent with the BLM sign handbook.

## Recommended Materials

- Medium-Density Overlay Plywood (MDO) Marine-quality  $\frac{3}{4}$  inch plywood with one side covered with a smooth but more porous overlay than high-density overlay (HDO) plywood. The porosity of the overlay allows the paint to bond with the substrate better than the more expensive HDO. Available at most local sign shops.
- Aluminum. Recommended for road signs and boundary signs.
- Polyplate. Fiberglass reinforced composite. Excellent surface to receive all types of graphic applications. Weather resistant, durable, lightweight.
- High Pressure Laminate panels. Recommended for interpretive trail signs. Highly resistant to vandalism.
- Corroplast. A plastic substrate available in 4'x8' sheets. Decals adhere easily to the surface. Recommended for temporary signs (trail closure, restoration areas, etc.).
- Alumacore light-weight aluminum material ideal for applying decals, U.V. protective coating.

## Sign Shapes/Colors

- A rectangle with the longer dimension orientated horizontally will be used for most informational signs.
- A rectangle with the longer dimension vertical will be used for most

regulatory and warning signs.

- Pantone brown 469 background with white lettering will be used for recreational signs and most regulatory signs.
- White background with red or black lettering will be used on road signs and regulatory signs needing special emphasis.

## Sign Types

A variety of sign types described below are recommended to welcome the visitor and to provide direction and guidance regarding land use regulations, interpretive information and boundary demarcation. Depending on their design and placement, signs can have information on them that serves simultaneous or single functions. The discussion that follows groups the recommended types of signs into seven categories:

- Entry
- Information and Safety
- Boundary
- Regulatory
- Directional Trail Signs
- Interpretive
- Temporary

Within these groups additional categories of signs are recommended and details specified. Figure 4-7, the Ma-le'l Dunes CMA Signing Map, illustrates the recommended, general location of each type of sign within the project area. In general, placement of signs should be carefully selected to minimize visual impacts on the surrounding natural area while providing adequate visitor information and guidance.

### *Entry Signs*

#### *Highway and Coastal Access Signs*

BLM will contact the CalTrans Regional Sign Coordinator (Dave Gustafson, 445-6379) to provide two signs (one north facing, one south facing) with the words "Ma-le'l Dunes Access" and an arrow directing visitors traveling along Highway 255 to turn onto Young Lane. The sign will be approximately 60 inches wide and 30 inches high. It will have white letters on a brown background.

Coastal Access signs, which include the Coastal Access logo (footprints and wave) are supplied by the California Coastal Commission and are installed on state highways by Caltrans. These signs will be installed in conjunction with the "Ma-le'l Dunes Access" highway sign described above.

- The Coastal Access signs are 4 feet x 4 feet with white lettering on a brown background.
- BLM will contact Linda Locklin at the California Coastal Commission [llocklin@coastal.ca.gov](mailto:llocklin@coastal.ca.gov) or (831) 427-4875 to request that signs be installed.

### *Traffic and Parking Signs*

Signs with pedestrian and bicycle traffic symbols will be installed on the access road just past the entrance gate of Ma-le'l North. Speed limit, "no parking" signs and tow-away signs should also be placed at appropriate locations along the access road.

### *Main Entry*

The main entry to the CMA is located at the intersection of Young Lane and the access road. This is the first point where visitors will be informed about allowable uses of the area. A new, permanent entry sign will be installed, which will meet the following specifications:

- The sign will read: "Ma-le'l Dunes Cooperative Management Area" and will have both the USFWS and the BLM logos.
- Universal symbols with arrows will be prominently displayed to inform visitors of the allowable uses.
- The sign will be approximately 4 feet x 8 feet and should reflect the distinct character of the area and incorporate a logo created specifically for the CMA.

Another sign nearby will display the distance to the Ma-le'l North parking area. With limited parking at the Ma-le'l North parking area, it is important that visitors quickly understand the broader range of permitted recreational uses allowed in the southern portion of the CMA.

### *Ma-le'l South Entry*

Some signs for the Ma-le'l South entry have already been installed and are described in the existing conditions Section 3.2.1, Existing Use and Access Infrastructure, Ma-le'l South. An additional sign is recommended on the access road heading south indicating "no parking" at the trail entry and directing cars to proceed to the Ma-le'l South parking entry.

### *Ma-le'l North Entry*

There will be two signs adjacent to the access gate across Ma-le'l Road, which will contain the following information:

- "Ma-le'l Dunes Cooperative Management Area, Open to Vehicular Traffic Friday through Monday. Open to bicycles and pedestrians Seven Days a Week. Open Sunrise to 1 Hour After Sunset, No Camping." This sign will be approximately 2 feet x 2 feet.



An example of a coastal access sign.

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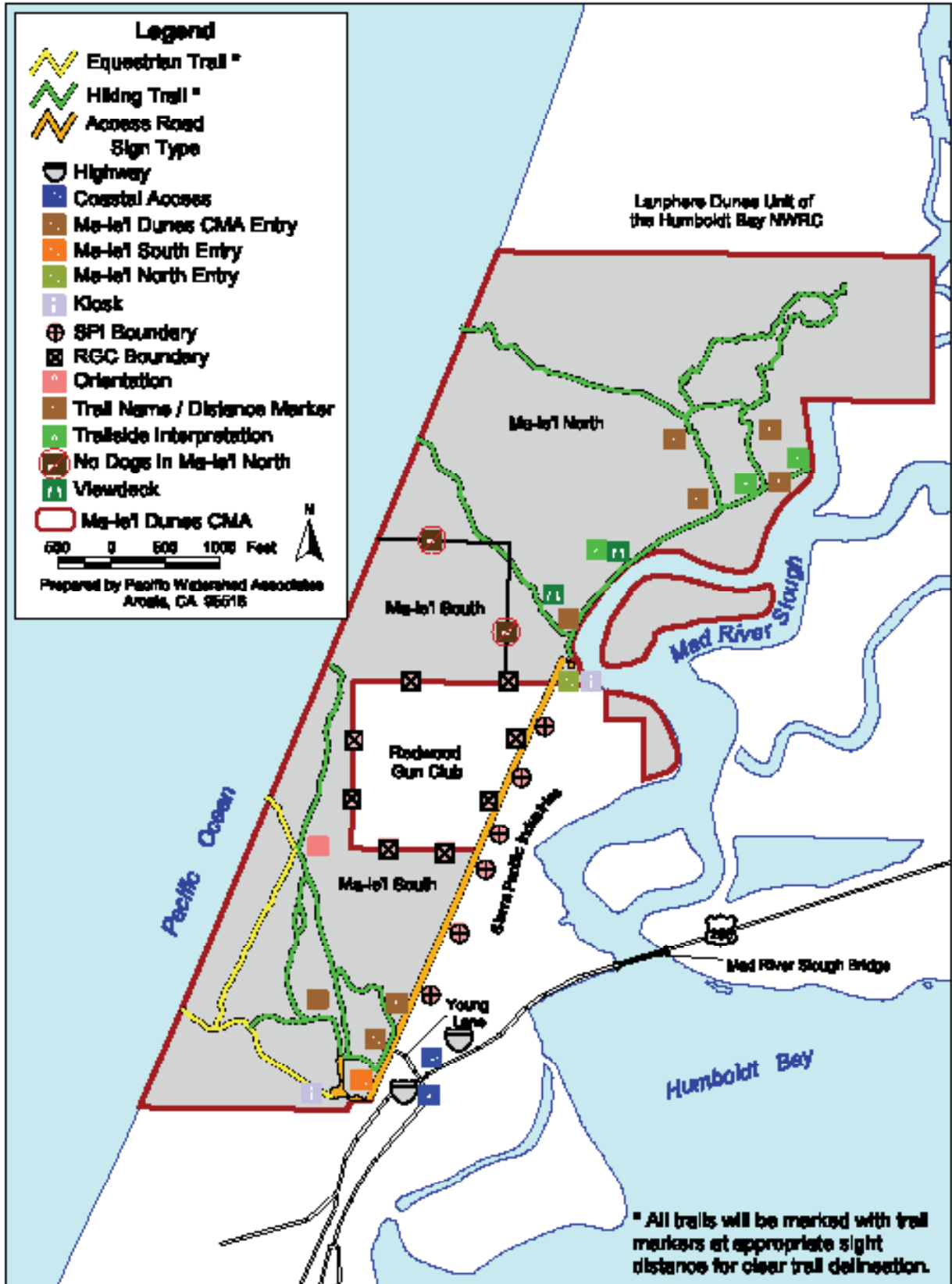


Figure 4-7

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- The RGC hours of operation, which are 10-4, Saturday and Sunday, and contact information. This sign will be approximately 3 feet x 3 feet.

Keeping these two signs separate and different in appearance will make it clear that the RGC is a separate entity.

At the Ma-le'l North parking area, there will be a rectangular entry sign, approximately 48 inches x 24 inches, with a brown background, white lettering. It should contain the following information:

- "Ma-le'l Dunes Cooperative Management Area North Entrance" with the USFWS logo.
- In smaller letters it should indicate that it is the Ma-le'l Dunes Unit of the Humboldt Bay NWRC.
- Universal signs for no dogs, no horses, no camping, binoculars, and wheelchair access will be included.

### *Information and Safety*

General site and safety information will be conveyed on signs placed in both the Ma-le'l South and Ma-le'l North parking lots.

### *Kiosks*

"Rocket"-style kiosks will be located at both the Ma-le'l South and Ma-le'l North parking area trailheads. Kiosks will contain a trail map, a list of use regulations and interpretive and safety information. Near each kiosk, there will also be a visitor sign-in sheet contained in a weatherproof structure. Safety issues to be addressed include:

- Tsunamis
- Poison oak
- Low tidal warnings to boaters
- Warning not to leave valuables in car
- Any aggressive behavior of dogs should be reported to the BLM Ranger and/or care taker.

### *Orientation Signs*

Orientation signs will help visitors orient as they visit different use areas within the site. The sign content will include:

- "You are here" with an arrow
- Trail map
- "No cross country hiking beyond this point"
- "No dogs/horses" or symbol
- Other site amenities such as parking lots

- Trail lengths and level of difficulty
- Suggested size: 11 inches x 14 inches

### *Boundary Signs*

Boundary signs will be carefully placed to demarcate ownership change or a change in jurisdiction. Signing intervals of boundary signs may vary depending on safety concerns, impact to the visual quality of an area or issues regarding enforcement of use regulations. Generally, boundary signs shall be in the line of sight. In the project area there are six boundary types to be signed:

- RGC property boundary signs should be erected along the length of the fence line at appropriate intervals. The boundary should be signed with: "Redwood Gun Club, Do Not Enter". An entry sign, approximately 4 feet x 3 feet should be placed at the RGC entry gate stating: "Redwood Gun Club Open 10-4 Saturday and Sunday (with contact information)."
- The USFWS Boundary will be signed with the USFWS "A" Series Blue Goose sign. The sign should be white with blue lettering, 11 inches x 14 inches, and should be in the line of site, no more than ¼ mile spacing between signs with the exception of the property line between the USFWS and the BLM. This boundary will have signing limited to areas where the trail intersects a property line in order to minimize the visual impact in an open dune area. This customized approach to boundary signing is acceptable due to the unique nature of the CMA (personal communication, Eric Nelson, 2005).
- Boundary signs at approximately 300-foot intervals will be installed to designate the Ma-le'l South and Ma-le'l North property boundary.
- "No dogs beyond this point" signs to be posted with USFWS Boundary sign.
- The boundary between the Ma-le'l Dunes Unit and the Lanphere Dunes Unit should be signed at intervals of no more than 300 feet from the beach to the forest edge to indicate a USFWS management change.
- The SPI boundary will be signed along the access road and the North parking lot. Signs will be approximately 11 inches x 14 inches and read: "Sierra Pacific Industries- Do Not Enter." These boundary markers will also be placed on the gate where Sierra Pacific Industries' boundary crosses the HBMWD easement with the additional statement: "Unauthorized Access Prohibited."

### *Regulatory Signing*

Regulatory signing will convey Ma-le'l Dunes CMA regulations, especially in areas with a high potential for user conflicts. It is recommended that most regulatory signs at the CMA be brown with white lettering with the exception of road signs, which will be white with black or red lettering.

Visual elements and regulatory language for signing should be clear, attention-grabbing and consistent with the management guidelines of both BLM and USFWS. In addition, restrictions related to the following subjects should be addressed:

- Hours of operation and gating policies
- Traffic and parking
- Biological resources protection including restriction of boating and landing on the salt marsh areas or islands'
- Cultural Resource Protection

### *Directional Trail Signs*

#### *Trail Route and Distance Markers*

In open dune habitats it can be difficult to distinguish trail corridors. Trail route markers will be used to create a trail corridor in open dune situations that lack a clear path.

- Where corridors are undefined, the distance between markers will depend on the line of sight.
- Markers will be constructed using 4 inches x 4 inches redwood posts with a 2 inches circle routed on the front. The routed circle will be color-coded to match area trail maps. This system is used at Manila Dunes Recreation Area and a similar system is used at Lanphere Dunes.
- At trail junctions where visitors have a choice of routes, low, wood-routed signs will contain trail names, arrows and mileage and destinations as appropriate. These will be done in the same style as the trail directional signs at the former Mad River Slough and Dunes.

### *Interpretive Signs*

#### *Trailside Interpretive Signs*

Interpretive trail signs will be limited to the parking and picnic areas and the ADA accessible Cukish Trail. Sign design should be consistent with other interpretive signing on site and should adhere to the RCAA Interpretive signing manual (2003). Interpretive themes are discussed below. The signing manual provides a variety of sign base options.

- These signs will use the Mad River Slough template from the RCAA signing manual, be 24 inches x 36 inches, and be made of high-pressure laminate material.
- It is recommended that the interpretive signs along the trails be constructed in a cantilevered style with bases similar to those at Headwaters Forest trail (see photo on this page).

### *Temporary Signs*

Low-cost temporary signs may be needed for seasonal postings or to indicate areas undergoing restoration, etc. Examples of temporary signs include:

- Signing to deter mushroom picking in forest areas.
- Signing for areas along bank of slough indicating "No Landing/ Re-vegetation in progress," and "Re-vegetation/erosion control in progress."

Temporary signs should be constructed using Corroplast with UV resistant materials and should contain the Ma-le'l Dunes CMA logo.

## 4.5.2 Interpretation and Information

### **Interpretive Themes**

Interpretive information should be organized around main themes that are engaging and help the visitor easily assimilate information. When material is organized around themes, all interpretive information relates back to the main theme and sub themes. Sub themes develop detailed messages that support the main theme. Visitors are more likely to take home key messages when information is organized thematically.

#### *Main Theme*

The Ma-le'l Dunes is a culturally significant place to the Wiyot people who have a long history of habitation in the area and of making use of the area's diverse and abundant resources.

#### *Sub-Themes*

The following are sub themes that should be incorporated into interpretive signs and publications. The Cultural Resource Specialist for the Wiyot Tribe should be consulted when developing for the public interpretive information relating to Wiyot culture.

- Restoration activities help restore natural diversity and endangered species habitat.
- The juxtaposition of eleven different habitat types in a relatively small area is responsible for the wealth of diversity found within the Ma-le'l Dunes.
- The Mad River Slough's long history of use both for travel and as a source for food continues to this day.
- Public involvement has played a critical role in the protection of the Ma-le'l Dunes.

## Publications and Public Information

### *Humboldt Beach and Dunes Map and Guide*

The Humboldt Bay Beach and Dunes Map should be revised and updated to include the Ma-le'l Dunes CMA. The map has had several reprints with the same cover. The map was originally printed with funding from the SCC as part of the HBDMP implementation grant. In the past the BLM, USFWS and the County have provided funding for reprints.

A map should be updated and reprinted with consideration of the following recommendations:

- A reprint with a new cover, featuring a photo from the Ma-le'l Dunes, will capture attention and stand out as compared to previous reprints. RCAA's current Humboldt Bay Trail Plan layout should be incorporated into the revised map.
- The look of the map should be updated with new photographs.
- Much of the information and layout can stay the same and public access information about the Ma-le'l Dunes should be added including:
  - Location
  - Open hours
  - Describe cooperative management
  - Indicate allowed uses (using universal symbols) distinguishing between north and south
  - Description of unique features

### *Trail Map and Brochure*

A Ma-le'l Dunes Trail Map and Brochure should be created to include:

- A detailed map of the trail system, color-coded such that trails are easily identified.
- Use regulations, distinguishing between north and south jurisdictional regulations relating to horses, dogs, no camping, fires, etc.
- Natural history information relating to the key interpretive themes for the area.
- Information about the activities of the RGC, including open hours, shooting limited to a supervised target range, etc.
- Updated information regarding cultural and environmental values of the area.
- How the efforts of the Humboldt Coastal Coalition, FOD, SCC, FWS, BLM, CNLM and other community members helped to create and protect the Ma-le'l Dunes CMA.

### *Pocket Field Guide*



An example of an interpretive sign on a base at Headwaters Forest Trail.

A five-panel laminated field guide focusing on beach and dune flora and fauna was produced by the FOD with funding from the HBDMP implementation grant in 2000 and should be updated to highlight the Ma-le'ī CMA.

#### *Humboldt Bay Water Trail*

The kayak and canoe ramp in Ma-le'ī North will be incorporated in the Humboldt Bay Water Trail system and associated trail map and guide. Humboldt Bay Water Trail signing from the RCAA signing manual will be used to convey information about tides and boat safety.

#### *Posting Public Information*

Other information about the CMA that should be conveyed to the public will be posted within a space provided on the "rocket" kiosks located at each trailhead entry. Information that the public should be aware of relative to the area will be posted within the kiosk.

### **Interpretive Programs**

It is anticipated that FOD will play an important role in the implementation of interpretive programs at Ma-le'ī Dunes CMA. FOD will be the clearinghouse for scheduling interpretive programs involving other groups/organizations using a web-based calendar. To the extent that funding and personnel permit, FOD will continue conducting volunteer restoration days and will return to offering public-guided walks in the area.

Other potential partners for providing interpretive programming in the Ma-le'ī Dunes CMA include:

- Audubon
- California Native Plant Society
- HSU Natural History Museum
- Explore North Coast
- Sierra Club