Midpeninsula Regional Open Space District

PLANNING AND NATURAL RESOURCES COMMITTEE

R-21-12
January 26, 2021

AGENDA ITEM 3

AGENDA ITEM

Programmatic Environmental Permitting for the Open Space Maintenance and Restoration Program

GENERAL MANAGER'S RECOMMENDATION

Receive a presentation and project update on the Programmatic Environmental Permitting for the Open Space Maintenance and Restoration Program. No committee action required.

SUMMARY

Midpeninsula Regional Open Space District (District) obtains as needed environmental permits for ongoing maintenance, operations, and construction activities that may affect protected waters and species. The District utilizes a mix of "programmatic" permits that cover many routine activities within District boundaries and "individual" permits that cover specific, non-routine projects. Staff have been working with regulatory staff from the US Army Corps of Engineers (Corps), US Fish and Wildlife Service (USFWS), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) to refine a programmatic permitting approach for all routine land management activities described as the District's "Open Space Maintenance and Restoration Program." The covered activities include road and trail maintenance, conservation grazing, habitat restoration, vegetation management, and wildland fire resiliency work. The Planning and Natural Resources Committee (PNR) will receive an informational update on the project and have an opportunity to discuss the project in greater detail before final permit applications are submitted.

DISCUSSION

Background

Environmental permits largely fall within two categories: water and wildlife, which derive from the Clean Water Act and Endangered Species Act respectively, each having state and federal versions. Much of the District's work that generates the need for environmental permitting is centered around water that intersects with District infrastructure, including trails, roads, bridges, and ponds. Additionally, many of the protected species on District preserves (e.g. California red-legged frog, San Francisco garter snake, western pond turtle) are associated with these aquatic habitats and obtaining permits for potential impacts to these species becomes a component of the environmental permitting process. Therefore, most projects require species and water-related permits from both state and federal agencies (see Attachment 1, Jurisdictional Diagram). Since the passage of Measure AA in 2014, the District has experienced a significant increase in the number of required permits given the growth of the maintenance and capital programs.

Another driver for this project is the need to renew the programmatic agreement with the RWQCB, which expired in 2018 and has been extended temporarily for two years. The RWQCB's shared authority with the Corps under the Clean Water Act requires a joint 401/404 water quality certification for District activities. The RWQCB conditioned the renewal of the District's programmatic agreement for routine maintenance activities with a requirement for the District to obtain a similar agreement with the Corps. The Corps permit process ("Regional General Permit") entails federal consultation with USFWS, known as the Section 7 process under the Endangered Species Act, and consultation with the State Historic Preservation Officer (SHPO) under Section 106. While each of the State and Federal agencies have different statutes, laws, and administrative processes, combining them into one permit process provides for greater efficiencies for District and Resource Agency staff.

Staff and Horizon Environment and Water, LLC., (District consultant on this project) have worked to develop a draft Program Manual that serves as a large appendix to the permit applications themselves, detailing the Open Space Maintenance and Restoration Program. In many ways, the Program Manual contains all the important information about the permits. The Introduction chapter is included as Attachment 2.

Pre-application discussions with agency staff have indicated that several changes compared to past processes are likely, including:

- Each project site/activity shall receive a short, written analysis from District biologists who will determine a 'tier' of potential effects and the qualifications of bio-monitors.
- Some activities will be covered by a 'recovery' permit from USFWS while others will be handled under 'incidental take.' This reflects administrative changes at USFWS on what is to be covered on all recovery work in the State and not any changes to the District's program.
- Through the Corps consultation with SHPO, a programmatic approach to cultural resources will be part of the District review process.

The program will be analyzed by the California Environmental Quality Act (CEQA) and each project/activity will need to use the Best Management Practices (BMPs) and mitigation measures developed therein. Having a comprehensive list of these BMPs and mitigation measures ensures staff, tenants, and contractors who perform work in District lands adhere to a uniform set of conditions that have been reviewed and approved by the State and Federal agencies. The area covered by the permits is to be expanded to the entire District boundary (including sphere of influence), except for Bay-front properties. The Bay-front properties, like Ravenswood Open Space, have already obtained environmental permits for recent work. The proposed permitting approach will allow for all new acquisitions, easements, etc., to be automatically included without modification of the permits. Staff is also proposing the ability to use the permits on partner or private lands when overseen by District staff and where there is a public benefit (e.g. a shaded fuel break that is partly on District lands and partly on private lands).

The program will analyze the total effects of these activities within the jurisdiction of the regulatory agencies and is designed to be self-mitigating, meaning the temporary effects of regular land management maintenance activities have less negative impact than the positive effects of the restoration work undertaken by the District. A pre-application meeting with RWQCB staff is scheduled for January 22, 2021, prior to the presentation of this report.

At this time, there is no guarantee that the permitting approach will be approved, however, the District's strong working relationship with the Resource Agencies and the broad coverage of the existing permitting agreements suggests they will be receptive to the program as proposed.

Once the agencies have approved the permits, the Open Space Maintenance and Restoration Program will have an annual process of pre-construction notifications, implementation, and annual reporting. The term of the permits will likely be five years with a five-year extension. Going forward, all routine land management activities will either be covered by the Integrated Pest Management Program, Wildland Fire Fuel Resiliency Program, the Open Space Maintenance and Restoration Program, or a combination of all of them. This provides a comprehensive review process for the reoccurring work the District undertakes to steward open space preserves. The same list of covered activities is also being used as the basis for a "Master Permit" with San Mateo County. Their jurisdictional interests are quite different, but discussions to date indicate a strong overlap between these processes. Once the details in the State and Federal permits have been settled, the application process with San Mateo County can proceed.

In July of 2018, the Board of Directors (Board) authorized the General Manager to enter into contract with Horizon for the first phase of work for a total not-to-exceed amount of $99,734 (R-18-90) to determine the best permitting approach for the District. In April of 2019, the Board authorized the General Manager to amend the contract with Horizon to undertake the second phase of work to obtain the necessary permits for an amount not-to-exceed $799,563 (R-19-54).

FISCAL IMPACT

The presentation on Programmatic Environmental Permitting for the District's Open Space Maintenance and Restoration Program has no fiscal impact. The FY21 amended budget includes $418,000 for the existing contract with Horizon. Funding for the remainder of Horizon's contract will be requested as part of the annual Budget and Action Plan process.

PUBLIC NOTICE

Public notice was provided as required by the Brown Act.

CEQA COMPLIANCE

This item is not a project subject to the California Environmental Quality Act. Staff anticipates an Initial Study and Mitigated Negative Declaration for the project will be issued in the Spring of 2021.

NEXT STEPS

Staff will work to finalize all outstanding issues with the agencies, direct Horizon to finalize the permit applications, and post the CEQA document. Staff anticipates submitting the permit applications in the next few months. The completion of the project is dependent on agency staff availability and is projected for fall 2021.

Attachment(s)

1. Jurisdictional Diagram
2. Chapter 1 of the Program Manual

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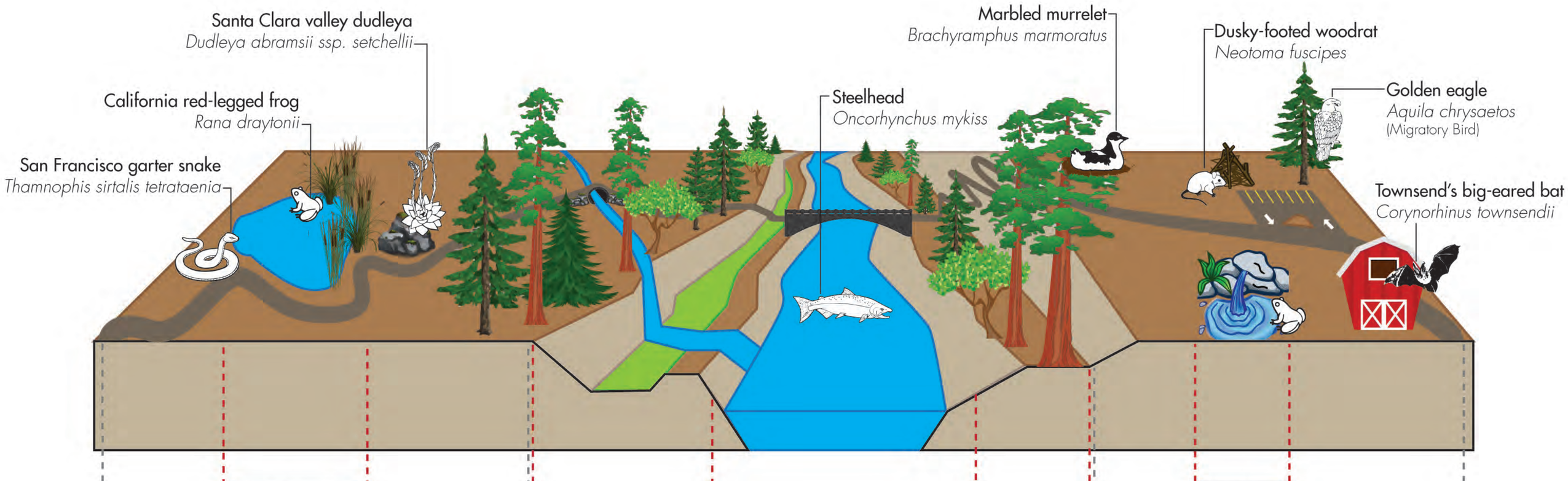
Environmental Jurisdiction Diagram*

Midpeninsula Regional Open Space District



Wetlands

water, plants, soil
USACE
USFWS
CDFW
SFRWQCB

Uplands

special status species
USFWS
CDFW

Ordinary High Water

1.5 - 2 year storm elevation
U.S. Army Corps of Engineers (USACE)
National Marine Fisheries Service (NMFS)
U.S. Fish & Wildlife Service (USFWS)

Riparian Area

floodplain, vegetation, or physical connectivity
California Department of Fish and Wildlife (CDFW)
San Francisco Regional Water Quality Control Board (SFRWQCB)

Springs

water, plants, soil
CDFW

Uplands

special status species
USFWS
CDFW

*Does not include:
- Water Rights administered by the State Water Resources Control Board
- City or County Environmental Ordinances or Codes

MIDPENINSULA REGIONAL OPEN SPACE

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Created by: Jamie Hawk, Aaron Hebert & Julie Andersen, MROSD Staff

File Location: G:\Projects\a_Districtwide\Natural_Resources\JurisdictionalGraphic

Chapter 1 Introduction

1.1 Program Purpose and Background

Midpeninsula Regional Open Space District (Midpen) was founded in 1972 and protects over 64,000 acres of open space in the South Bay and San Francisco Peninsula. Most of these lands are located within 26 open space preserves that form a connected greenbelt in the greater Santa Cruz Mountains region for plants and animals to thrive while also providing ecologically-sensitive low-impact recreational opportunities for local residents to enjoy the forests, baylands, ridgelines, and mountains of the South Bay Area. These diverse and scenic landscapes, from bay wetlands to redwood forests and coastal grasslands, host an incredible diversity of life, making Midpen's region one of the world's biodiversity hotspots. Midpen OSPs have long and complex histories of human use prior to becoming public open spaces. Midpen actively manage the land and waterways to restore their health and function, helping the local ecosystem become more resilient in a time of climate change. By caring for the land, the land in turn takes care of Midpen, providing tangible and intangible benefits like clean air and water, flood protection, and the opportunity for restorative experiences in nature. **Midpen's Open Space Maintenance and Restoration Program (OSMRP) Manual (Manual) describes the ongoing, regular stewardship activities within Midpen Preserves for the purpose of obtaining State and Federal environmental permits.**

MIDPEN MISSION STATEMENT

To acquire and preserve a regional greenbelt of open space land in perpetuity, protect and restore the natural environment, and provide opportunities for ecologically sensitive public enjoyment and education.

Midpen boundaries enclose an area of 227,900 acres in northern Santa Clara and southern San Mateo counties, and a small portion of Santa Cruz County. Midpen's Sphere of Influence includes an additional 8,333 acres near its southernmost boundary, of which most of this land is held within Midpen's Sierra Azul Open Space Preserve. In 2004, Midpen's boundaries were

expanded to include more than 140,000 acres of the San Mateo County coast, from the Pacific Ocean to the Santa Cruz Mountain ridgeline, between Montara to the north and the San Mateo and Santa Cruz County line to the south (also referred to as Midpen's Coastside Protection Area or Coastal Annexation Area[1]). The Midpen's Coastside Protection Area has an added mission focused of protecting workable agricultural lands and coastal watersheds and preserving the rural character of the region. Midpen partners with small-scale local ranchers to use conservation grazing as a land management tool for enhancing native coastal grasslands and providing wildland fire protection.

MIDPEN Coastside MISSION STATEMENT

To acquire and preserve in perpetuity open space land and agricultural land of regional significance, protect and restore the natural environment, preserve rural character, encourage viable agricultural use of land resources, and provide opportunities for ecologically sensitive public enjoyment and education

Midpen manages land primarily to preserve a regional greenbelt of open space land. There are generally few improvements, other than parking areas, some rest rooms, and informational signs. Relevant guidance documents that have described and directed Midpen's preserve management approach include:

- Regulations for Use of Midpeninsula Regional Open Space District Lands (July 1993, as amended)
- Resource Management Policies (December 2018)
- Vision Plan (2014)
- Top 25 Open Space Projects Identified in Midpen's Vision Plan (2014)
- Integrated Pest Management (IPM) Program Guidance Manual (September 2014)
- Service Plan for the San Mateo Coastal Annexation Area (June 2003)
- Draft Wildland Fire Resiliency Program (as of January 2021)
- Individual Open Space Preserve Plans or Master Plans

[1] Note that approximately three-fifths of Midpen's Coastside Protection Area is located within the Coastal Zone Boundary. Thus, all lands within the Coastal Zone are subject to local coastal policies adopted by San Mateo County pursuant to the California Coastal Act.

1.1.1 Midpen Vision Plan and Measure AA

In 2014, voters passed Measure AA, a 30-year, $300 million general obligation bond funding open space projects, including land conservation, restoration, and public access projects, described in Midpen's Vision Plan (2014). The bonds will be used over the next 25 years to:

- Protect natural open space lands;
- Open preserves or areas of preserves that are currently closed to low-intensity public enjoyment and education;
- Construct public access improvements, including new trails and staging areas; and
- Restore and enhance open space land (i.e., forests, streams, watersheds, and coastal ranch areas).

During the first five years of funding (2014-2019), Midpen preserved an additional 2,000 acres, restored open space lands (i.e., forests, watersheds, and grasslands), opened the Bear Creek Redwoods OSP and La Honda Creek OSP to public access, added new trails on the Mount Umunhum summit and Mindego Hill, and re-introduced over 300 acres of land to conservation grazing as a land management tool to protect grassland habitat. In 2018, Midpen's Board of Directors adopted a new list of Measure AA projects that focused on opening additional public access areas and restoring habitat in Bear Creek Redwoods OSP and La Honda OSP. Measure AA funds will only be used for the 25-key project portfolios first identified in the 2014 Vision Plan and further described in the Top 25 Open Space Projects (2014).

With Measure AA funding, Midpen has more resources to acquire land for conservation and preservation purposes, improve public access by adding new unpaved trails and other amenities to existing preserves and opening areas of preserves that are currently closed, and restore and enhance natural habitats.

1.1.2 Programmatic Permitting Need

Midpen annually conducts a few large-scale capital improvement and dozens of smaller maintenance projects on its open space preserves to ensure proper care of the land and provide for ecologically sensitive public access opportunities. To date, many of these activities have been developed and permitted individually with State and Federal environmental regulators, like the U.S. Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service (USFWS), the San Francisco Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). Midpen also permits small scale work through 'programmatic' permits that cover many projects annually. Midpen has a Routine Maintenance Agreement (RMA) with CDFW, a maintenance-focused Waste Discharge Requirements (WDRs) and a 401 certification from the RWQCB, and species-specific recovery permits for the San Francisco Garter Snake and California Red-Legged Frog with the USFWS and for San Francisco Garter

Snake and California Tiger Salamander with CDFW. **All of these permits together represent the State and Federal permits needed to steward Midpen's open spaces, protect the environment, and restore important habitats.**

Without a broadly applicable and consistent permitting strategy, small and large maintenance and construction projects take significantly longer to plan, permit, and construct. These delays create scheduling uncertainty and are costly to the public taxpayer. The purpose of developing the Open Space Maintenance and Restoration Program (Program) is to streamline the permitting process and provide a more strategic and integrative *approach* to the planning and scheduling of preserve maintenance, low-impact facility improvements, and habitat enhancement and restoration that are the core of both Midpen's overall mission and coastside mission, mentioned above. **Administering Midpen's maintenance and restoration as a Program, versus a series of individual activities, allows Midpen to establish and follow a consistent set of maintenance methods, best management practices (BMPs), and impact avoidance approaches**. Midpen conducts projects that protect and enhance the natural environment. The purpose of the Routine Maintenance and Facilities Improvements Program Manual (Manual) is to describe those activities that comprise the Program. This includes routine maintenance projects, habitat enhancement and restoration projects, and new small-scale construction activities that facilitate access for natural resource management and species recovery, such as improved or new unpaved trails.

This Manual provides guidance and practices that avoid and minimize potential environmental impacts during implementation of Program activities. The Manual describes impact mitigation approaches and monitoring and reporting activities. In addition, this Manual serves as a basis for Midpen to comply with the California Environmental Quality Act (CEQA) and other resource agency permitting requirements.

While the standard operating procedures and guidelines described in this Manual are intended to provide the Program with consistent approaches, **the Program is also envisioned to be flexible and subject to periodic updates to reflect improved understanding of resource conditions, new technologies, and adaptive management practices within preserves over time**. Midpen acquires new lands each year and new challenges from climate change also drive the need for adaptation. This Manual will be submitted for review and comment to the following resource agencies: CDFW, USFWS, San Francisco Bay Regional Water Quality Control Board (RWQCB), the Central Coast RWQCB, and USACE.

1.2 Program Objectives

The objectives of the Program include:

- Streamlining the regulatory permitting process by obtaining comprehensive long-term permits that improve work planning and implementation, and reduce delays.

- **Utilizing existing and planned Midpen restoration and enhancement efforts in a strategic manner to ensure that the overall Program has a net benefit to regulated habitats and special-status species**.
- Protecting and enhancing the natural environment and improving low-intensity public access throughout Midpen open space preserves.
- Avoiding and minimizing potential impacts to the natural environment when conducting activities by assessing habitat, species, and resource conditions.
- Identifying and prioritizing maintenance and facilities needs by weighing potential impacts vs. permitting requirements and timelines.

1.3 Conservation Outcomes

Conservation outcomes of the Program, which were derived and modified from Midpen's Resource Management Policies, IPM Guidance Manual, and Wildland Fire Resiliency Program, include:

- Reduce soil disturbances, erosion, and water quality impacts associated with maintenance activities through careful planning combined with implementation of BMPs that provide erosion control and protect water quality.
- Promote growth of native vegetation and protect and restore special-status species and sensitive habitats, and rehabilitate areas disturbed prior to Midpen ownership.
- Acquire and provide public access to lands while also protecting and restoring natural resources.
- Remove and manage invasive species while protecting natural resources and public health.
- Reduce fire fuels that contribute to the risk of catastrophic wildfire and restore ecosystems by removing invasive plant species and/or dead and excessive accumulated vegetation due to past fire suppression.

1.4 Program Area

The Program area currently consists of nearly 64,000 acres of protected open space in the Counties of San Mateo, Santa Clara, and Santa Cruz (refer to Figure 1-1). Most of these lands are located in 26 open space preserves (refer to Table 1-1) within either the Skyline region or Foothills region (refer to Figures 1-X through 1-X). Existing conditions within each open space preserve are described in Chapters 3 and 4.

Table 1-1. Existing Midpen Open Space Preserves

Open Space Preserve	Size (Acres)	Miles of Existing Trail	Grazing	Foothill or Skyline Region	County/ Community
1. Bear Creek Redwoods	1,437	7.2	No	Foothill	Los Gatos
2. Coal Creek	508	3.7	No	Skyline	Palo Alto Foothills
3. El Corte de Madera Creek	2,906	34.8	No	Skyline	La Honda
4. El Sereno	1,430	6.5	No	Foothill	Los Gatos/ Monte Sereno
5. Foothills	212	0.2	No	Skyline	Palo Alto/ Los Altos
6. Fremont Older	739	12.1	No	Foothill	Cupertino
7. La Honda Creek	6,144	10.6	Yes	Skyline	La Honda
8. Long Ridge	2,226	14.1	No	Skyline	Skyline
9. Los Trancos	274	6	No	Skyline	Los Altos
10. Miramontes Ridge	1,716	--	No	Skyline	Half Moon Bay
11. Monte Bello	3,537	18	No	Skyline	Palo Alto/ Los Altos
12. Picchetti Ranch	308	3.1	No	Foothill	Cupertino
13. Pulgas Ridge	366	6.2	No	Foothill	San Carlos
14. Purisima Creek Redwoods	4,798	28.9	Yes	Skyline	Half Moon Bay
15. Rancho San Antonio	3,988	25.2	No	Foothill	Los Altos Hills
16. Ravenswood	374	1.3	No	Foothill	East Palo Alto
17. Russian Ridge	3,491	13.1	Yes	Skyline	Skyline
18. Saratoga Gap	1,613	1.4	No	Skyline	Saratoga
19. Sierra Azul	18,939	25.8	No	Foothill	San Jose

20. Skyline Ridge	2,143	12.4	Yes	Skyline	Skyline
21. St. Joseph's Hill	270	4.2	No	Foothill	Los Gatos
22. Stevens Creek	55	0.7	No	Foothill	Mountain View
23. Teague Hill	626	.2	No	Skyline	Woodside
24. Thornewood	167	1.6	No	Skyline	Woodside
25. Tunitas Creek	1,660	--	Yes	Skyline	Half Moon Bay
26. Windy Hill	1,414	13.6	No	Skyline	Portola Valley

The Program area contains over 900 culverts (including ditch relief and stream crossings), 150 trail bridges (including fords, puncheons, and boardwalks), 25 vehicle bridges, 230 miles of streams (excluding many unmapped seasonal drainages and tributaries), 100 waterbodies (mostly ponds), 115 miles of single-track maintained unpaved trails, and 230 miles of maintained roads (including paved, unpaved seasonal, and unpaved all-season).

Midpen's open space preserve system also expands over time. Midpen acquires several hundred acres across multiple properties each year and sometimes thousands of contiguous acres at once from private landowners. Newly acquired properties often come with a number of environmental issues needing attention, including:

- permitted and unpermitted structures built in sensitive environmental areas,
- unpermitted ponds or water diversions,
- invasive species,
- poorly designed and maintained roads, and
- generally degraded infrastructure and disturbed and/or degraded habitat.

Midpen undertakes comprehensive planning processes for these properties; however, urgent items such as road repairs, invasive species, or other critical natural resources issues must be addressed rapidly and would be addressed as part of this Program. Larger scale projects on new lands take longer to fund and develop and therefore fit well with the individual permit process and are not a subject of this proposed Program.

Midpen also oversees and facilitates work on neighboring lands or partner properties (such as lands of the Peninsula Open Space Trust, State Parks, the San Mateo Resource Conservation District etc.), bringing expertise, sometimes funding, and permitting to activities that are consistent with the approved Program permitting framework.

1.5 Summary of Program Activities

The vast majority of Midpen's proposed Program activities benefit listed species and their habitats, consistent with Midpen's mission statement. Table 1-2 provides a summary of activities that are covered by the Program, which includes: (1) routine maintenance activities; (2) small-scale facility improvements and new low-intensity/small footprint facilities; and (3) restoration and enhancement projects. Facility improvements and new facility projects will be included in the Program when they are necessary to maintain preserve facilities and amenities in good condition and can simultaneously reduce the threat of, or correct degradation of, natural environments, particularly where sensitive species will benefit. .

Table 1-2. Summary of Program Activities by Facility or Feature

Facility or Feature	Typical Examples of Activity Type
Routine Maintenance Activities	
Ponds/lakes	Berm repair/maintenance Outlet, inlet, and pipe repair Trash and woody debris removal Vegetation removal Sediment removal (may include some recontouring) Invasive plant treatment Wildlife structure install (basking platforms/logs) Livestock exclusion fencing
Water supply structures	Spring box and/or water tank maintenance or replacement Water line replacement, extensions, or realignments Instream diversion intake clearing Vegetation removal
Roads	Grading and shaping (may include rocking) Culvert repair and replacement Removal of asbestos from culverts and other structures Sediment and debris removal at inboard ditches and stream crossings (including culvert inlets, outlets, and rocked fords) Fords and swales repair and replacement (including new culverts in place of fords) Bank stabilization Repair of gabion rock or riprap Road brushing/mowing

	Vegetation management
	Minor relocation of road segments (unpaved) to correct resource concerns (e.g. erosion, rutting)
	Installation of new roadside and trailside ditch relief culverts at non-stream crossings
	Repair and replacement of driveways
Bridges	Replace decking and handrails
	Minor structural repairs
	Repair and fortify bridge abutments
	Sediment and debris removal
	Addition of surface material to puncheons
	Vegetation management/removal
	Bridge removal or replacement (e.g., increasing span to outside OHWM)
	Removal of lead paint
Roadside/trailside ditches	Replace culverts and ditches
	Replace and repair fords
	Sediment and debris removal
	Vegetation management
	Cleaning ditches
Trails	Grading and shaping
	Culvert repair and replacement
	Repair and replace fords and swales (including with new culverts)
	Bank stabilization
	Repair of gabion rock or riprap
	Trail brushing/mowing
	Vegetation management
	Minor relocation
	Sediment and debris removal at channel/trail crossings
Creeks	Vegetation management
	Sediment and debris removal
	Downed tree management and large woody material removal
	Bank stabilization
Other Midpen Parks and Open Space features (picnic or rest	Invasive species removal (e.g. manual, mechanical, chemical, and biological) in natural lands

areas, natural areas, rangeland, staging areas, parking lots, tenant structures, field offices, etc.)	Fire fuel management (e.g. manual, mechanical, grazing, and chemical) for disc lines and fuel breaks Maintenance/clearing of defensive space buffers around buildings, staging areas, roads, trails, and use areas Mechanical and chemical treatment of vegetation at helicopter landing zones
New Facilities and Improvements	
Bridges	Bridge relocation or new installation to reduce resource/water quality impacts
Interpretive facilities and signage	Installation of new low-intensity, small-footprint interpretative facilities and signage at existing preserves
Ranching infrastructure	Improve existing ranching infrastructure, including fences, corrals, stock water
Utilities	Maintenance of septic, telephone, telecommunications, and other utilities etc.
Trails	Reroute existing unpaved trails and provide new trail connections and public access
Wildlife crossings	Construct wildlife crossings some of which may also provide public access
Existing buildings and structures	Repair existing structures to provide habitat for wildlife species
Water infrastructure	Install or replace or remove degraded water infrastructure facilities
Restoration and Enhancement Activities	
Removal of in-stream infrastructure (i.e., impoundments) and collapsed structures (i.e., bridges or culverts) or upsizing of culverts	Creation of aquatic habitat and/or improvement of fisheries habitat, flows, sediment transport
Native vegetation plantings and seeding	Habitat enhancement
Traditional ecological knowledge practices (indigenous stewardship)	Plant gathering, seed collection, and plantings
Wildlife friendly spring box/troughs	Habitat enhancement and prevents wildlife entrapment
Pond and stream restoration	Improve ponds and streams to restore aquatic habitat

Treatment of invasive species	Habitat enhancement
Exclusion fencing	Habitat enhancement to exclude cattle and protect species
Prescribed burns	Habitat enhancement, fuels management, and cultural fire
Conservation grazing	Fuels and species/grassland management
Road decommissioning	Restored hydrology and watershed processes
Structural demolitions in riparian or other sensitive areas	Habitat enhancement

1.6 Projects or Activities Not Included in the Program

The Program does not include large, complex projects, such as new paved parking areas, new ponds, new offices, or other projects that significantly increase visitor capacity to Midpen preserves. These types of activities would be outside of the scope of the Program and thus, would be permitted separately (to the extent that permits are needed for those activities).

In addition, emergency maintenance actions or unplanned repair work are not included in the Program, nor addressed by Program CEQA compliance or permits and authorizations. A situation is considered an "emergency" if it is a sudden, unexpected occurrence involving a clear and imminent danger that demands immediate action to prevent or mitigate loss of or damage to life, health, property, or essential public services (Public Resources Code Section 21060.3). An emergency situation could involve activities that would otherwise be considered routine maintenance activity as described in this Manual but may need to occur at an unplanned time. Although emergency situations are not covered by the permits authorizing Program activities described in this Manual, Midpen will make every effort to follow the impact avoidance and minimization guidance provided in this Manual when implementing activities under emergency conditions.

1.7 Natural Resource Protection and Impact Avoidance

Midpen's lands were acquired and managed to improve habitat. As urban development has intensified in the Bay Area, Midpen's lands have been a refuge for a variety of protected and important species. The unintended result of this is that the environmental protections given to those species bear especially on Midpen's land management. Most of Midpen's Preserves contain special status species or their habitats. Midpen's projects almost always have the potential to impact these species if not for the close observation of biologists or the carefully timed construction to avoid them. Various portions of the Program area have sensitive habitat for special-status species including but not limited to critical habitat for California red-legged frog, San Francisco garter snake, marbled murrelet, and Bay checkerspot

butterfly (refer to Figure 4-5a to 4-5d in Chapter 4, *Biological Resources*). Midpen values these natural resources and aims to minimize impacts to these species and their habitats and other sensitive resources by implementing impact avoidance and minimization measures. In addition, the Program is designed to be self-mitigating (i.e., **habitat enhancement and restoration activities offset Program impacts**). Chapter 4 of this Manual, *Biological Resources*, describes the sensitive natural resources in the Program area. Chapter 10, *Impact Avoidance and Minimization, BMPs, and Mitigation*, further describes the Program's approach to reduce potential environmental impacts and includes a comprehensive table that identifies BMPs for the Program. Detailed BMPs including those implemented for specific biological resources and cultural resources are presented in Chapter 10.

Each permitting agency has its own enabling laws and statutes that drive how they evaluate and the individual and cumulative effects of Midpen's land management; a potentially negative effect to one agency may be a beneficial change to another. For the USFWS, a project must have a reasonably direct benefit to a listed species to be a 'recovery' action and benefit from a recovery permit. Much of Midpen's restoration program are recovery actions. Other activities, like roads maintenance, do not directly benefit a listed species like California red-legged frog (CRLF) and are therefore analyzed differently under a different permit. Even so, improving watershed conditions supports CRLFs and in many cases helps manage sediment in watersheds that are impaired under the Clean Water Act. Midpen's program often blurs the line between maintenance and restoration because of its mission to restore the environment. Activities that may be initiated for an operational or maintenance reason are often modified to better serve a restoration purpose or may be combined with a nearby restoration project for efficiencies.

Throughout this Program Manual, the temporary, permanent, and potential impacts to the environment are discussed in light of each maintenance and restoration activity. This is how these activities are analyzed by the relevant permits without assessing the overall or net effect of Midpen's stewardship, until the concluding chapters that look at program as a whole. The program as a whole is 'self-mitigating' in that any impacts are more than offset by the measurable, beneficial actions Midpen takes.

1.8 Example Typical Activity within the Program

Unpaved dirt roads sometimes lack proper drainage and introduce excess sediment into streams and watersheds. Midpen seeks to improve road drainage through maintenance of its roads. These roads provide trail access, emergency response, and help Midpen steward natural resources. A common problem is an undersized culvert, which coveys water underneath a road to and from a natural stream channel. When these pipes are too small, they sometimes get plugged with tree limbs and other natural material. After getting plugged, the water levels rises and erodes the road, eventually moving parts of the road into the stream system. The water quality is then impacted and habitats for aquatic species are harmed. To prevent this from happening, Midpen replaces undersized culverts with larger culverts or bridges. **The**

construction of properly designed culverts causes "temporary" and "permanent" impacts to the environment (as described through the lens of the Clean Water Act), even though the project itself improves the environment overall. Temporary impacts could include fine dusty soil entering the creek, noise disturbances to nesting birds, or the removal of vegetation necessary to physically access the culvert. Permanent impacts would be a longer culvert, which reduces the amount of natural channel length, but prevents erosion and better mimics the natural channel slope. Midpen uses the best management practices for roads and trails to protect the environment (such as those in the California Salmonid Stream Habitat Restoration Manual).

The culvert pictured below is conveying water from a small tributary to Harrington Creek, which flows to San Gregorio creek, home to some of the best salmonid habitat in the region. The old culvert (top photo) extends just beyond the road and juts into the air, causing water to plunge into the stream below and erode. If not for the replacement culvert, sediment from this erosion would eventually flow downstream and may harm eggs laid by salmon by covering them, depriving them of oxygen. In the photos below, the replacement culvert is angled down to match the natural angle of the creek and then rock is placed below the outlet to dissipate the energy and reduce the potential for erosion. From a permitting standpoint, there are temporary and permanent impacts, but it's still a benefit to the environment overall. **This culvert replacement and many others in La Honda Open Space Preserve were funded by the Fisheries Restoration Grant Program.**

Figure 1 Existing old culvert

Figure 2 Replacement Culvert

Figure 3 Replacement Culvert Energy Dissipater

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