



Midpeninsula Regional
Open Space District

R-15-47
Meeting 15-10
April 22, 2015

STUDY SESSION AGENDA ITEM 1

AGENDA ITEM

Conservation Grazing Program Overview 2015

GENERAL MANAGER'S RECOMMENDATION

A handwritten signature in black ink, appearing to be "J. J. J.", written in a cursive style.

Receive an informational presentation on the District's Conservation Grazing Program.

SUMMARY

An informational presentation will provide the Board of Directors with an overview of the District's FY2015-16 plan for Conservation Grazing as approved in the current Action Plan and Budget and important program issues anticipated this fiscal year. The agenda for the presentation is provided as Attachment 1.

DISCUSSION

History and Policy:

The District has a commitment through its Mission to protect the diversity and integrity of natural resources for their value to the environment and people. These natural resources include extensive grassland habitats found throughout many District preserves. In 2004, as part of the San Mateo Coastal Annexation, the District worked with multiple stakeholders to develop the Coastside Protection Area Service Plan (Service Plan). Through the Service Plan, the District committed to:

- Conserve open space and agricultural land
- Encourage viable agricultural use of the land
- Preserve agricultural operations on the coast

In addition to the Service Plan, the District also developed a Memorandum of Understanding (MOU) with the San Mateo County Farm Bureau which pertains to agriculture and land use issues on District lands located within the Coastside Protection Area. In 2007, the District Board of Directors developed a Grazing Management Policy (Attachment 2) as part of the District-wide Natural Resource Management policies. The Grazing Management Policy states that the District *"uses conservation grazing to manage fuel for fire protection; enhance the diversity of native plants and animals; help sustain the local agricultural economy; and foster the region's rural heritage."* Following the development of this policy in 2007, the District began utilizing livestock grazing as a resource management tool, beginning with grazing on Skyline Ridge.

Update on Current Conservation Grazing Program

The District currently utilizes livestock grazing to manage grasslands and associated wildlife habitat, including stockponds, on approximately 9,760 acres on four preserves -- Tunitas Creek, Skyline Ridge, Purisima Creek Redwoods, and La Honda Creek (See map - Attachment 3). In FY2015-16, the District plans to reestablish grazing on the 1,047 acre Mindego Hill portion of Russian Ridge Open Space Preserve, bringing the total Preserve acres managed under conservation grazing to 10,800, which is approximately one sixth of the District's total acreage (Attachment 4).

Conservation grazing leases and management of grazed lands provide well-known benefits to the District including reducing wildfire fuel load, enhancing native plant diversity and abundance, reducing invasive plant species, enhancing sensitive wildlife habitat, and fostering the agricultural heritage of the San Mateo County coast. While the conservation grazing leases generate some revenue for the District, the District receives far more value in the ecosystem services and land management assistance provided by grazing tenants. One example of this is Driscoll Ranch, where the current grazing tenant improved the distribution of livestock by distributing water sources around the ranch for livestock and wildlife, resulting in a dramatic improvement to the grazing of the exotic annual grasses, control of invasive weeds, and a reduction in damage to sensitive habitats on this preserve. In October 2013 the District Board of Directors received an informational presentation on conservation grazing management strategies which summarized information regarding the compatibility of livestock grazing with public recreation and the natural resource benefits derived from a well managed livestock grazing operation.

Significant Conservation Grazing Issues:

While conservation grazing provides many benefits to District lands, it also comes with challenges and compromises for both the grazing tenants and the District. A number of these challenges are ongoing, but the District is working diligently to resolve or alleviate them. Some of the key issues that will be addressed throughout 2015 include:

Drought – Exacerbated by the fourth consecutive year of drought in the region, annual forage production and water available for livestock is far lower than average. In 2014, the San Gregorio Water Master ordered mandatory restrictions for use of water for livestock water within the watershed. As a result, the District has been working with grazing tenants this grazing season to reduce stocking rates by up to 50% and shortening grazing seasons to conserve and protect resources. The reduced stocking rates and additional water system development on these preserves has also increased water available for wildlife, as well as livestock. The District will continue to work closely with the water master to ensure that District water usage is in compliance with state mandates as well as work with our ranchers to clearly communicate when and where livestock can use the water resources. This may at times require the District to request the rancher remove livestock from the property. Section 6(d) and 6(f) of the District grazing leases allow for the mandatory 'emergency reduction of grazing capacity' in the event of a natural event such as drought or wildfire and 'minimum residual dry matter requirements' established in the grazing management plan.

Predation – Over the past three grazing seasons, mountain lion predation on livestock has impacted several grazing tenants on District preserves when mountain lions have killed livestock, resulting in a financial burden for the grazers. In addition, coyotes killed a number of smaller livestock animals on the Toto Ranch during 2014. The District has been working with the grazers to implement best management practices to minimize the risk of predation on

livestock and has offered financial compensation for lost livestock under the General Manager's authority. The District is working to develop a formal Predation Policy during FY2015-16 to address management of predators, interactions and conflicts with the public, and impacts to livestock grazing on District preserves.

Infrastructure Improvements – Improvements to the District's grazing infrastructure has been either provided by the District in the form of capital projects or via rental credits to the rancher as outlined in their lease (see Attachment 5 – Grazing Infrastructure Summary). Generally, livestock grazing on District preserves has not required significant capital projects to make the properties viable for grazing and to protect natural resources. However, to make the larger properties that have recently entered the grazing program viable for cattle, a significant increase in infrastructure improvements is required this fiscal year. The General Manager will be recommending a number of Measure AA projects to improve various infrastructure elements on the Districts grazing properties for Board consideration (see Looking Ahead, below).

Looking Ahead at Conservation Grazing on District Preserves:

Mindego Ranch Opening

In FY2015-16, the District plans to open its first preserve combining public access and grazing, the Mindego Ranch portion of Russian Ridge Open Space Preserve. Over the past several years, the District has visited several sister agencies in the Bay Area, met with the San Mateo County Farm Bureau, and met with Cuesta La Honda Guild to develop a grazing strategy for the property that will achieve the District's resource management objectives, protect water quality, and provide a safe, enjoyable visitor experience in the preserve. Additionally, the District worked with the US Fish and Wildlife Service and the California Department of Fish and Wildlife to develop a Recovery Permit for Mindego Ranch which allows for maintenance and improvements to be made to the property which provides habitat for one of seven populations of San Francisco garter snakes (SFGS) as well as California red-legged frogs (CRLF). The Recovery Permit requires the use of livestock grazing to manage vegetation on the property to enhance habitat for CRLF and SFGS. Several projects have been completed under the protection of the Recovery Permit, including fence work and an expansive livestock water system completed in March 2015.

Through years of research, planning, and successful conservation grazing efforts, the District is turning the corner in conservation grazing on public lands and allowing public access on a grazed preserve is the next big step in the District's conservation grazing efforts. During FY2015-16, the District will develop and install interpretive, educational signage on the property to inform the public about safety around livestock as well as the benefits derived from grazing livestock. The District will also install a number of self-closing pedestrian gates to allow easy access by preserve visitors while minimizing potential impacts to the grazing operation. A comprehensive Grazing RFP process will be conducted during the summer of 2015 to select the most qualified, responsible grazing tenant to graze the preserve, with a focus on natural resource management and public land grazing experience in the context of public access. The District will work with the new tenant to ensure a smooth transition into recreational use on the grazed preserve and set an example for future recreational opportunities on grazed preserves.

Toto Ranch and October Farm

Rangeland Management Plans will be prepared for the Toto Ranch area of Tunitas Creek Open Space Preserve and the October Farm area of Purisima Creek Redwoods Open Space Preserve during FY2015-16. These properties were both purchased from POST, and per the requirements

of Coastal Service Plan the District retained the existing tenants on these properties under a year to year lease arrangement. Completion of these Rangeland Management Plans will allow the District to enter into long-term leases for these properties.

FISCAL IMPACT

The Natural Resources Department FY2015-16 Budget includes \$523,000 for grazing related infrastructure, including \$91,000 for improvements at Mindego Ranch. Additionally, the development of the Predation Policy has a budget of \$10,000.

BOARD COMMITTEE REVIEW

The Planning and Natural Resources Committee will review the Predation Policy as it is being developed, which is scheduled to begin in the third quarter of FY2015-16. Development of the Rangeland Management Plans for the ranches mentioned above will also be reviewed by the Planning and Natural Resources Committee with the Toto Ranch Rangeland Management Plan scheduled to begin during the second quarter of this fiscal year, and the October Farm Rangeland Management Plan scheduled to begin in the fourth quarter of this fiscal year.

PUBLIC NOTICE

Public notice of this Study Session was sent to the San Mateo County Farm Bureau, District agricultural tenants and prospective bidders, the San Mateo County Board of Supervisors and Agricultural Advisory Committee, and the Resource Management Interested Parties list. Notices were posted as required by the Brown Act.

CEQA COMPLIANCE

This item is not a project subject to the California Environmental Quality Act.

NEXT STEPS

Staff will continue to implement the Conservation Grazing Program and necessary infrastructure development projects. Additionally, the Request for Proposals to select a grazing tenant for the Mindego Ranch area of Russian Ridge Open Space Preserve will be released in May, 2015, with a recommendation for award of lease anticipated for Board of Directors consideration in August, 2015.

Attachment(s)

1. Workshop Agenda
2. MROSD Grazing Management Policy
3. Map – District Agricultural Lands
4. Grazed Properties Summary
5. Grazing Infrastructure Summary

Prepared by:

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Contact person:

Same as above

SPECIAL MEETING
BOARD OF DIRECTORS OF THE
MIDPENINSULA REGIONAL OPEN SPACE DISTRICT

330 Distel Circle – Los Altos, CA 94022

April 22, 2015 – 5:00 pm

“Informational Workshop: 2015 Update on District’s Conservation Grazing Program”

- I. Introduction and Workshop Outline
- II. Conservation Grazing Policy
 - a. Grazing Management Policy
 - b. Coastside Service Plan
 - c. MOU with San Mateo County Farm Bureau
- III. Overview of Grazed District Preserves
 - a. Summary of Livestock Grazing on Open Space Preserves
- IV. Significant Conservation Grazing Issues
 - a. Drought
 - b. Predation
 - c. Infrastructure
 - i. Summary of Infrastructure Improvements Completed to Date
 - ii. Additional Infrastructure Projects for 2015
- V. Public Recreation & Grazing (Turning the Corner in our Conservation Grazing Program)
 - a. Timeline for Recreation on a Grazed Preserve
 - i. Mindego Ranch
 - b. Signs, Public Outreach and Education
 - c. Trail Management
 - d. Grazing Tenant Selection/Livestock
- VI. Conclusion / Questions

XI. GRAZING MANAGEMENT

BACKGROUND

The vegetation of the Santa Cruz Mountains is comprised of a rich and diverse assemblage of plant species. This wealth of diversity was most evident within the grassland **ecosystems** that evolved under a variety of disturbance pressures including fire and grazing by large herds of **ungulate animals**, which are now mostly extinct. The **flora** that emerged has been described as one of the most diverse and species rich ecosystems in the United States.

The arrival of early Spanish and Anglo settlers initiated a particularly dramatic change in species composition of California grasslands, primarily as a result of tilling the grasslands for agricultural crop production, reduction of **native** grazing animals and introduction of cattle herds brought over from Europe and let loose on the new rangeland. This introduction of **non-native** plants and animals, coupled with the concurrent suppression of fire on the landscape as the western United States was settled, resulted in the substantial replacement of the native grassland vegetation with a predominately **exotic**, annual flora. The exotic vegetation is often more competitive, productive, and prolific than the native plants within which it coexists, and tends to dominate and replace existing native grasses and wildflowers. Over the last 150 years, coastal grassland areas have also experienced large-scale conversion to agriculture or urban development. The remaining undeveloped grasslands face continued development pressure and are severely impacted by exotic, invasive organisms.

The District's **open space** preserves contain large acreages of grasslands that in many areas have been degraded due to the pressures described above. Management of these grassland habitats is desirable to reduce the risk of wildfire and to maintain viable native plant communities. **Vegetation management** using **livestock** grazing or other **resource management** tools can be a substitute for native grazing animals and recurring fire to achieve the District's objective of preserving, protecting and restoring the **natural** environment.

The greatest diversity within California's coastal grasslands can be seen in the forbs or wildflowers that emerge in the spring following winter rains. Sites with adequate management of non-native vegetation will reward these efforts with bountiful displays of colorful spring wildflowers.

By some estimates, nearly 80 percent of the vegetation cover within California grasslands is exotic vegetation.

District lands currently contain approximately 5300 acres of grassland habitat. The largest contiguous grassland areas are within District lands in western San Mateo County.

Livestock ranching is a small but vital part of the Bay Area's agricultural economy. As with any business that depends on local infrastructure and services, livestock ranching is increasingly threatened with each ranch that goes out of business. Every livestock rancher depends on services and supplies including veterinary care, feed sales and delivery, farm and ranch infrastructure supplies, and livestock transportation services. As land is taken out of ranching, all of these services and supplies are incrementally affected and may cease to operate, increasing the burden for families and businesses that choose to keep ranching.

*Typical fencing used to control livestock movement is **five-strand barbwire fencing**. Other fencing types that may be used include four-strand barbwire for interior fencing, wood rail fencing and temporary electric fencing that can be installed to seasonally restrict livestock to target areas or exclude livestock from sensitive areas. Wildlife-friendly fences enable virtually all wild animals to move through an area without harm and with minimal impediment.*

In 2003, the District completed the Service Plan and accompanying Environmental Impact Report for the San Mateo Coastal Annexation Area expansion of the District's boundaries to include coastal San Mateo County. The Service Plan recognized the unique value of the San Mateo County coastal area and established Agricultural Policies to preserve and encourage viable agricultural use of land. The Policies and Implementation Measures established in this Grazing Management Policy are intended to supplement and complement the Agricultural Policies in the Service Plan. Furthermore, these Grazing Management Policies will be implemented in a manner that is consistent with the Service Plan.

GRAZING MANAGEMENT GOALS, POLICIES, AND IMPLEMENTATION MEASURES

Goal GM- Manage District land with livestock grazing that is protective of natural resources and that is compatible with public access; to maintain and enhance the diversity of native plant and animal communities, manage vegetation fuel for fire protection, help sustain the local agricultural economy, and preserve and foster appreciation for the region's rural agricultural heritage.

Policy GM-1 Ensure that grazing is compatible with and supports wildlife and wildlife habitats.

- ◆ Inventory and assess sensitive habitats to identify areas requiring special management practices. The conservation of these areas will take precedence over other uses and management practices that are determined to have an adverse effect on these **resources**.
- ◆ Prepare site-specific grazing management plans by a certified rangeland manager including **best management practices (BMPs)** for preserves where grazing will be utilized as a resource management tool. The site-specific grazing management plan will be a compo-

ment of the agricultural production plan developed through the Use and Management Planning process. The Use and Management Planning process provides for public input and Board approval of site-specific grazing management plans.

- ◆ Manage agricultural leases and easements to protect and enhance **riparian** areas and to maximize the protection or **enhancement** of **water quality**. (See WR-4)

Policy GM-2 Provide necessary infrastructure to support and improve grazing management where appropriate.

- ◆ Utilize fencing that allows wildlife movement and fosters habitat connectivity. (See WM-3:Measure 3)
- ◆ Manage access to existing water features and where needed supply supplemental drinking water through stock ponds and water troughs to preserve clean water for livestock, protect water quality, and enhance habitat for wildlife.
- ◆ Encourage and assist grazing tenants on District land to provide range improvements to **restore** or conserve **wildland** resources and to enhance range condition.
- ◆ Inventory and assess roads and trails on District lands to identify significant erosion and sediment sources – abandon and where feasible restore to a natural condition poorly designed or sited roads. (See WR-4)

Policy GM-3 Monitor environmental response to grazing on District lands.

- ◆ Monitor forage utilization and distribution by grazing animals to assure appropriate amounts of **residual dry matter (RDM)** remain on the ground to achieve desired resource management objectives. In the course of RDM monitoring, evaluate and report on wildland fire **fuel** levels that may result in an increased risk of wildland fire (See WF policies).
- ◆ Monitor livestock use levels and **agricultural infrastructure** condition to insure conformity with lease provisions to contribute to improved management.

Residual Dry Matter (RDM) is a measure of the amount of vegetation left on the ground, typically measured at the end of the summer or fall. Appropriate levels of RDM strive to minimize thatch, which can inhibit new plant growth, while maintaining adequate levels of vegetation to prohibit soil erosion.

Fire reduction is a great concern for some landowners. However, cattle are not able to graze all land areas effectively for fire protection purposes, such as steep slopes or slopes partially vegetated with brush. In these instances, goats may be an effective alternative. Goat herds can be rented for a short period of time and can be moved with a goat herder and dog(s) along with portable fence enclosures.

- ◆ Monitor wildland conditions with an emphasis on documenting the location, distribution and abundance of native grasses, wildflowers, and other native flora and fauna.
- ◆ Monitor water quality in ponds, **wetlands**, and **watercourses** with unrestricted livestock access.
- ◆ Monitor non-native vegetation response to grazing with an emphasis on documenting the location, distribution and abundance of **target, invasive species**.
- ◆ Use information collected from monitoring to annually review rangeland conditions and response to livestock grazing. Use **adaptive resource management decision making framework** within grazing management plans.

Policy GM-4 Utilize different livestock species to accomplish vegetation management objectives.

- ◆ Research the effective use of cattle, goats, sheep, and horses to manage vegetation on District lands.
- ◆ Utilize appropriate species depending on management needs.

Policy GM-5 Preserve and foster existing and potential grazing operations to help sustain the local agricultural economy.

- ◆ Establish longer term grazing leases to promote financial viability for the operators and efficient land stewardship for the District.
- ◆ Seek grants or other economic support for agricultural infrastructure maintenance and improvements.
- ◆ Ensure site-specific grazing management plans are economically feasible and practical for grazing operators.

Policy GM-6 Provide information to the public about the region's rural agricultural heritage. (See PI-1)

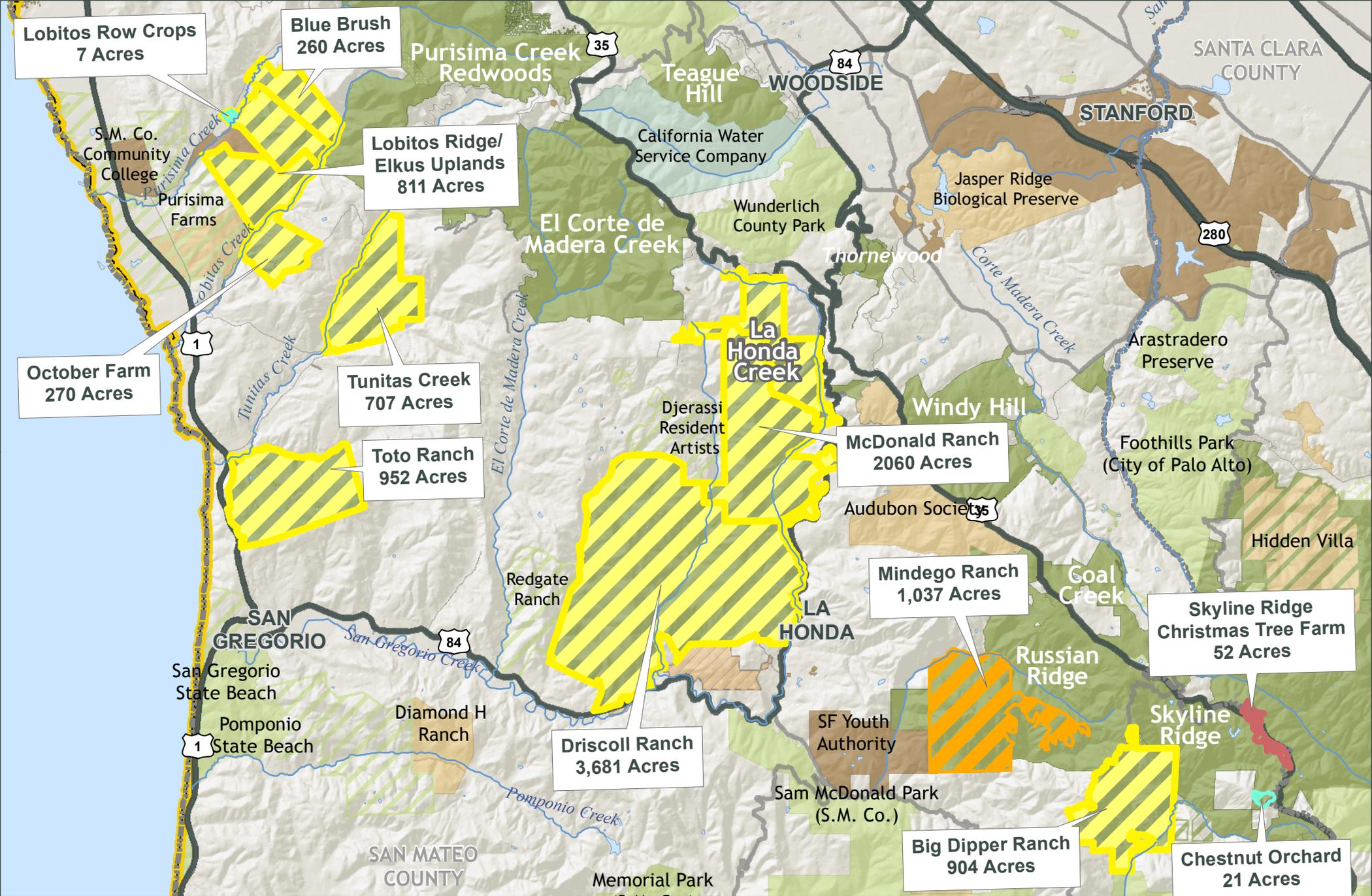
- ◆ Install display boards and give presentations highlighting historical and educational facts about ranching families and industry at appropriate sites.

Policy GM-7 Provide public access in a manner that minimizes impacts on the grazing operation. (See PI-1)

- ◆ Grazing operators on District lands or lands under easement to the District shall be consulted when public access is being planned and considered for the property to minimize conflicts between the public and the grazing operation.
- ◆ Prepare and distribute a brochure to educate visitors about etiquette for use of open space property with livestock animals.
- ◆ Install signage where appropriate to educate the public about the resource benefits of grazing and to educate visitors about approaching animals, closing gates, and other etiquette appropriate for moving through lands with livestock animals.

Policy GM-8 Grazing operations on District lands in the Coastside Protection Area will be managed in accordance with the policies established in the Service Plan for the San Mateo Coastal Annexation Area.

- ◆ Consult with appropriate agencies and interest groups, including the San Mateo County Farm Bureau and San Mateo County Agricultural Advisory Committee in the development of site-specific Use and Management plans and agricultural production plan components in the Coastside Protection Area.



Coastal Agriculture and Grazing Properties

- MROSD Preserves
- Other Protected Open Space or Park Lands
- Watershed Land
- Management Agreement
- Non MROSD Conservation or Agricultural Easement
- MROSD Conservation or Agricultural Easement
- Current Grazing
- Future Grazing
- Agricultural Crop
- Christmas Tree Farm

- Private Property
- MROSD Boundary
- County Boundary

ATTACHMENT 3



Midpeninsula Regional Open Space District
(MROSD)
April 2015



While the District strives to use the best available digital data, this data does not represent a legal survey and is merely a graphic illustration of geographic features.

Property	Preserve	Year first grazed under District ownership	Acres	Avg. Annual Rent (\$)**	Grazing Tenant
Big Dipper	Skyline Ridge	2007	955	\$6,900	Vince Fontana
Bluebrush Canyon	Purisima Creek	2009	302	\$2,400	Tom Pacheco
Lobitos Ridge	Purisima Creek	2010	389	\$3,000	Vince Fontana
Elkus Ranch Uplands	Purisima Creek	2009	450	\$3,500	Vince Fontana
October Farm	Purisima Creek	2012	270	\$3,300	Doug Edwards
Tunitas Creek Ranch	Tunitas Creek	2008	707	\$8,300	Doug Edwards
Toto Ranch	Tunitas Creek	2012	952	\$9,600	Erik & Doniga Markegard
Driscoll Ranch	La Honda Creek	2006	3,681	\$45,000	Agco Hay Co. (Renz Family)
McDonald Ranch	La Honda Creek	2014	2,060	\$23,500	Erik & Doniga Markegard
Mindego Ranch	Russian Ridge	2015 (Proposed)	1,047	\$9,600	TBD
Apple Orchard	La Honda Creek	2015 (Proposed)	300	\$5,500	TBD
TOTAL			11,113	\$120,600	

** Average annual rent was calculated using the Animal Unit Month (AUM) rate of \$23.05 and based on average stocking rates under non-drought conditions. Rent revenue has been as low as 50% below normal under drought conditions as stocking rates have been lowered to minimize any potential risk to natural resources and water quality.

GRAZING INFRASTRUCTURE BY PRESERVE (2007-present)			
BIG DIPPER (955 acres)- Vince Fontana			
	PAID BY DISTRICT (CONTRACTOR)	PAID BY TENANT (RENT CREDIT)	TOTAL
FENCE / CORRALS	\$34,906	\$900	\$35,806
WATER SYSTEM			\$0
VEGETATION MGT.	\$2,662	\$1,630	\$4,292
ROADS			\$0
MISC.			\$0
ELKUS UPLAND / LOBITOS (839 acres) - Vince Fontana			
	PAID BY DISTRICT (CONTRACTOR)	PAID BY TENANT (RENT CREDIT)	TOTAL
FENCE / CORRALS		\$280	\$280
WATER SYSTEM		\$225	\$225
VEGETATION MGT.		\$2,400	\$2,400
ROADS		\$850	\$850
MISC.			\$0
BLUEBRUSH CANYON (302 acres) - Tom Pacheco			
	PAID BY DISTRICT (CONTRACTOR)	PAID BY TENANT (RENT CREDIT)	TOTAL
FENCE / CORRALS			\$0
WATER SYSTEM	\$2,040		\$2,040
VEGETATION MGT.		\$1,080	\$1,080
ROADS		\$1,230	\$1,230
MISC.			\$0
TUNITAS CREEK/OCTOBER FARM (977 acres) - Doug Edwards			
	PAID BY DISTRICT (CONTRACTOR)	PAID BY TENANT (RENT CREDIT)	TOTAL
FENCE / CORRALS		\$770	\$770
WATER SYSTEM	\$17,613	\$2,950	\$20,563
VEGETATION MGT.		\$7,577	\$7,577
ROADS		\$5,285	\$5,285
MISC.			\$0
DRISCOLL RANCH (3,681 acres) - Allan Renz (Agco Hay Co.)			
	PAID BY DISTRICT (CONTRACTOR)	PAID BY TENANT (RENT CREDIT)	TOTAL
FENCE / CORRALS	\$14,820		\$14,820
WATER SYSTEM		\$131,526	\$131,526
VEGETATION MGT.	\$12,135	\$2,420	\$14,555
ROADS			\$0
MISC. (stockponds)	\$509,280		\$509,280

McDONALD RANCH (2,060 acres)– Erik and Doniga Markegard			
	PAID BY DISTRICT (CONTRACTOR)	PAID BY TENANT (RENT CREDIT)	TOTAL
FENCE / CORRALS	\$183,774	\$19,471	\$203,245
WATER SYSTEM	\$5,685		\$5,685
VEGETATION MGT.	\$11,700		\$11,700
ROADS			\$0
MISC.		\$300	\$300
TOTO RANCH (952 acres)– Erik and Doniga Markegard			
	PAID BY DISTRICT (CONTRACTOR)	PAID BY TENANT (RENT CREDIT)	TOTAL
FENCE / CORRALS		\$6,383	\$6,383
WATER SYSTEM	\$9,227	\$398	\$9,625
VEGETATION MGT.		\$1,950	\$1,950
ROADS		\$100	\$100
MISC.			\$0
MINDEGO RANCH (1,047 acres)- tbd			
	PAID BY DISTRICT (CONTRACTOR)	PAID BY TENANT (RENT CREDIT)	TOTAL
FENCE / CORRALS	\$63,446		\$63,446
WATER SYSTEM	\$96,529		\$96,529
VEGETATION MGT.	\$102,051		\$102,051
ROADS			\$0
MISC.			\$0