TABLE 3 - PRIORITY PROJECTS AND INVASIVE SPECIES WORK PLAN

Immediate Action = Complete within 3 years
Long-term Action = Initiate within 5 years
Routine Action = Areas where ongoing, continuous action occurs as part of regular maintenance

HABITAT MANAGEMENT ZONE, PRIORITY & PROJECTS	GOAL	PREFERRED TREATMENT	POTENTIAL IMPACTS TO HABITAT	FOLLOW-UP TREATMENT	BEST MANAGEMENT PRACTICES – Always Remove Biomass	SUCCESS CRITERIA
WETLAND MEADOW – IMMEDIATE ACTION *** Significant ground-disturbing work to be covered by Coastal Development Permit**						
Remove Cape ivy, English ivy, hemlock, wild radish, curly dock, Himalayan blackberry, Crocosmia, Echium and other weedy forbs	Total eradication of limited infestations.	Hand pull, or grub out. Cut English ivy vines in trees at ground level and spot-treat stems with herbicide. Consider green flaming or foliar chemical application in spring. Bag and dispose of biomass.	Minimal, localized ground disturbance.	Immediately treat new shoots with herbicide or hand pull or grub. Bag for disposal. On-going monitoring and treatment will be required.	Minimize ground disturbance – if needed, cover treated area with native chips or duff. Allow native species to revegetate naturally.	Reduction in extent and containment of ivy; eradication of invasive forbs in 3 years.
* Misc. invasive grasses in matrix of Wetland indicators (Bermuda and Kikuyu, in particular)	Total eradication	Hand pull or grub out	Ground disturbance with barren areas	Hand pull or grub. On-going monitoring and treatment will likely be required.	Allow native grasses to cover site and revegetate large barren areas with plugs of Santa Barbara sedge and creeping wild ryegrass. Control sediment during revegetation process with silt fencing around work site.	Eradication of velvet grass in 3 years and continuing reduction of cover of Bermuda & Kikuyu over time
Trim willow branches creeping into Wetland Meadow near Rio Road without disturbing root crowns	Remove tree cover over Wetland Meadow	Prune branches	Willow cover removed	Seasonal trimming		On-going pruning will be required.
Cypress hedge along Rio Road	Improve shoulder parking	Remove trees and grind stumps	Tree cover removed		Revegetate embankment with native plants.	Remove hedge

Build-up roadbed at Rio entry	Improve drainage and street runoff into Wetland Meadow	Installation of appropriate road material	Temporary sedimentation potential	Monitor performance during rain events	Temporary fiber wattles around construction site	Reduction of ponding at trailhead
Remove dead redwoods	Reduce fire hazard, enhance Wetlands	Removal of dead wood at ground level	Temporary localized disturbance	Monitor areas with increased sunlight and remove invasives that recruit	Plant arroyo willow cuttings, if appropriate.	On-going removal if trees continue to die
* Wet-season boardwalk link	Reduce impacts to Wetland vegetation	Construct elevated boardwalk connecting Willow and Serra trails. Use non-toxic materials.	Temporary ground disturbance during construction, installation of boardwalk and pilings.	Monitor for stability during rain events, remove debris if material catches on boardwalk.	Revegetate all disturbed ground with native Wetland species and propagules collected on-site.	Reduction in foot traffic and trampling in Wetland area.

HABITAT MANAGEMENT ZONE, PRIORITY & PROJECTS	**GOAL**	**PREFERRED TREATMENT**	**POTENTIAL IMPACTS TO HABITAT**	**FOLLOW-UP TREATMENT**	**BEST MANAGEMENT PRACTICES – Always Remove Biomass**	**SUCCESS CRITERIA**
LOWER RIPARIAN – IMMEDIATE ACTION						
Remove Cape ivy, English ivy, weedy forbs, periwinkle, white poplars, acacia, cactus, succulents, Pittosporum, Himalayan blackberry and other invasive plants	Total eradication of limited infestations before they become out of control.	Hand pull, grub or chainsaw; cut English ivy vines in trees at ground level and spot treat stems with herbicide. Consider green flaming or foliar chemical application in spring. Bag and dispose of biomass. Fell trees and spot treat stumps with herbicide.	Minimal, localized ground disturbance.	Immediately treat new tree shoots with herbicide; hand pull and bag vines and sprouts of other forbs for disposal. On-going monitoring and treatment will be required.	Cover treated area with native chips or duff and allow native species to revegetate naturally. Consider spreading native grass seed along western margin of Willow Trail. Plant arroyo willow cuttings where canopy is broken by tree removal. Plant plugs of Santa Barbara sedge.	Eradication of trees, reduction in extent and containment of ivy, eradication of invasive forbs in 3 years.
Remove dead redwoods	Reduce fuel loads and fire hazard, enhance Riparian habitat	Removal of dead wood at ground level	Temporary localized disturbance, potential for increased light	Monitor areas with increased sunlight and remove invasives that recruit	Plant arroyo willow cuttings, if appropriate.	On-going removal if trees continue to die
Remove invasive from Wetland areas bordering Serra Trail	Total eradication	Hand pull or grub out	Minimal disturbance	Hand pull or grub out as new plants appear	Allow native Wetland species to recruit	Eradication in 3 years

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MARTIN'S MEADOW AND TRAILHEAD – IMMEDIATE ACTION *** Significant ground-disturbing work to be covered by Coastal Development Permit**						
Remove ivy, eucalyptus, acacia and cypress from cul-de-sac area on Martin Road. Remove cotoneaster and ivy on trail below.	Eradication of invasive plants, revegetation with native species.	Remove trees entirely, grind stumps or apply spot treatment of herbicide; hand pull ivy and remove biomass.	Temporary ground disturbance	On-going monitoring to hand pull or grub ivy and address sprouting stumps	Revegetate tree removal area with coast live oaks or toyon. Cover bare ground with native duff or light mulch of chipped biomass. Avoid disturbing clay soil lens where rushes are located	Eradication of invasives in 3 years, with containment of ivy along trail below cul-de-sac.
* Realign trail across meadow	Merge fragmented prairie habitat and utilize existing CAWD easement. Remove trail through Prairie.	Rebuild fence and change access location; lightly score existing trail and reseed.	Temporary ground disturbance along old trail	Remove any invasives that colonize old trailbed	Revegetate with native grass seed collected on-site and lightly mulch with weed-free thatch or native chipped material. Avoid removing rushes, to the extent possible. Maintain CAWD easement as firebreak, as well as access to Mansion.	Growth of Coastal Prairie species, with less than 30% cover of non-native barnyard weeds.
Change mowing strategy	Promote late-season forbs	Mowing later in the summer or early fall every few years	Enhancement of late-season seed production and diversity	Regular monitoring to assess species diversity with and without regular mowing	Monitor and evaluate changed conditions, adjust mowing schedule if appropriate. Note influx of Coastal Scrub shrubs and remove if necessary to maintain Prairie habitat.	Increased cover of late-season flowering forbs after 3 years.

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LAIOLO GROVE – IMMEDIATE ACTION *** Significant ground-disturbing work to be covered by Coastal Development Permit**						
Obtain CDFW Streambed Alteration Agreement for work in riparian corridor						
Remove dead redwoods	Reduce fire hazard, enhance Riparian habitat	Removal of dead wood at ground level	Temporary localized disturbance, increased light	Monitor areas with increased sunlight; remove invasives.	Plant cuttings of black cottonwood to maintain canopy.	On-going removal if redwood trees continue to die
* Realign creek crossing to Doolittle Trail	Reduce damage to stream banks	Remove concrete step structure and widen trail on eastern bank, or construct bridge downstream	Temporary localized disturbance	Revegetate disturbed ground, or lightly much with native duff or chipped materials	Monitor new trail access for signs of erosion and correct, if needed	Reduced damage to stream bank an easier access to trail.
Remove Cape ivy, English ivy, annual nasturtium, invasive grasses	Control of invasive plants and revegetation with native species	Hand pull or grub and bag all biomass. Remove vines of nasturtium before seed sets. Consider green flaming or foliar chemical application on ivy species	Ground disturbance with barren areas.	Immediately treat new shoots with herbicide or hand pull and bag for disposal.	Revegetate with plugs of Santa Barbara sedge, creeping wild rye or native blackberry	Reduction in extent and containment of ivy, eradication of nasturtium in 3 years. Increased cover of native Wetland vegetation.
* Remove large eucalyptus and acacia and consider removing cypress. Remove invasive periwinkle. Remove ivy.	Eradication of invasive plants, revegetation with native species	Fell trees and either grind or spot treat stumps with herbicide, grub out acacia seedlings. Hand pull periwinkle	Temporary ground disturbance, increased light	Monitor areas with increased sunlight and remove invasives that recruit by hand pulling or foliar herbicide application	Revegetate tree area with arroyo willow and black cottonwood seedlings. Install plugs of Santa Barbara sedge and wild blackberry. Lightly mulch exposed soils with native chipped material	Eradication of invasive trees and periwinkle in 3 years, with containment of ivy
Address need and safety of well and rusted water tank	Secure well-head. Remove tank	Remove tank and revegetate pad.	Exposed ground below tank.	Revegetate with native species.	Revegetation of exposed site	Restoration of tank site

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FLANDERS GROVE – IMMEDIATE ACTION *** Significant ground-disturbing work to be covered by Coastal Development Permit**						
* Remove invasive eucalyptus, acacia, shrubs, including hedge of cypress, and weedy vines	Restoration of native habitat	Logging of trees; eradication of shrubs by grubbing and spot treatment of all cut stumps	Temporary localized ground disturbance, increased light to forest floor	Monitoring of stumps for resprouting and follow-up herbicide treatment, if necessary	Minimize damage from equipment used during logging, revegetate with toyon, other native shrubs, coast live oak and Monterey pine. Cover exposed ground with native duff or chip materials.	Eradication of non-native trees and shrubs in 3 years. Containment of invasive vines. On-going maintenance will be required.
Scout new potential trail alignment if/when alternate parking is developed and Mansion is sold or leased.		Locate potential trail to avoid removal of native vegetation	* New trail construction will impact localized area.			
LOWER GARDEN – IMMEDIATE ACTION *** Significant ground-disturbing work to be covered by Coastal Development Permit**						
* Remove invasive eucalyptus, acacia, shrubs	Restoration of native habitat	Logging of trees; eradication of shrubs by grubbing. Spot treatment of all cut stumps with herbicide	Temporary localized ground disturbance, increased light to forest floor. Survey to identify whether trees are utilized by Monarchs for winter roosting	Monitoring of stumps for resprouting and follow-up herbicide treatment, if necessary	Minimize damage from equipment used during logging, revegetate with toyon, other native shrubs and Monterey pine. Cover exposed ground with native duff or chipped materials. Survey in winter for butterflies.	Eradication of non-native trees and shrubs in 3 years. Containment of invasive vines. On-going maintenance will be required.
Expand garden area southwards into transitional zone at top of Martin's Meadow.	Address open transitional area and revegetate. Enhance seating area	Revegetate with native species appropriate for transitional habitat. Level sloped ground for flat trail and seating area.	Potential erosion from soil leveling or placement of imported material to enhance seating and create level trail bed.	Monitor, maintain weeding program and garden maintenance	Utilize native species appropriate for garden and natural environment. Contain newly leveled soil area with vegetation and fiber wattle.	Reduction of open, unvegetated area. Enhancement of seating area and views of Meadow and Mission
Formalize trail to Martin Road trailhead	Identify trail route	Create pathway between Mansion and CAWD easement	Temporary, minimal disturbance	Monitor for erosion, trail avoidance and mitigate if needed	Establish new trail tread with hand tools	Utilization of new trail alignment

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UPPER GROVE – IMMEDIATE ACTION *** Significant ground-disturbing work to be covered by Coastal Development Permit**						
* Remove invasive eucalyptus, acacia, shrubs	Restoration of native habitat	Logging of trees; eradication of shrubs by grubbing. Spot treatment of all cut stumps with herbicide	Temporary localized ground disturbance, increased light to forest floor. Survey to identify whether trees are utilized by Monarchs for winter roosting	Monitoring of stumps for resprouting and follow-up herbicide treatment, if necessary	Minimize damage from equipment used during logging, revegetate with toyon, other native shrubs and Monterey pine. Cover exposed ground with native duff or chipped materials. Survey in winter for roosting Monarch Butterflies.	Eradication of non-native trees and shrubs in 3 years. Containment of invasive vines. On-going maintenance will be required.
Identify and construct alternate parking area	Creation of alternate parking area near Garden entrance	Utilize flat area as far west of adjacent residence. Construct after removal of invasive trees	Ground leveling, vegetation removal, altered drainage	Monitor recruitment of invasive seedlings. Address potential erosion from drainage off impervious surface.	Pave or chip seal to reduce soil erosion and transport. Encircle work area with fiber wattle. Screen neighboring residence by planting Monterey pine and coast live oaks, with toyon for sub-canopy screening.	Development of parking to replace sites at Flanders Mansion
Remove informal use trails	Reduce habitat fragmentation	Use hand tools to replace native duff and leaf litter. Consider signage directing walkers to alternate trails	Temporary alteration of soil environment	Monitor and replace native duff if walkers continue to bypass formal trail network	Use hand tools and minimize soil disturbance	Reduction of off-trail walking and habitat fragmentation
* Identify new trail route connecting new parking area with formal trail network	Reduce habitat fragmentation by directing visitors to formal trail network	Employ minimal ground disturbance and align to avoid removal of native vegetation	Localized soil disturbance, potential for erosion	Monitor for erosion and mitigate if needed	Establish new trail tread with hand tools. Avoid disturbing roots of adjacent plants	Utilization of new trail alignment

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FLANDERS MANSION – IMMEDIATE ACTION						
Remove invasive, non-native plants from grounds and garden areas	Reduction of seed sources for Preserve	Log larger trees, grub shrubs and paint all cut stumps with herbicide. Hand pull or consider foliar application of herbicide on vines.	Removal of horticultural plantings will disturb soil and eliminate landscaping	Monitor for resprouting weedy plants and hand pull or spot treat.	Revegetate with native plants in garden settings and restore transitional areas at edge of natural Preserve habitat. Place chipped material over exposed soils to reduce erosion and mulch native plantings	Eradication of weeds in 3 years and restoration of natural habitat. Containment of invasive plants.

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EASTERN DRAINAGE – LONG-TERM ACTION *** Significant ground-disturbing work to be covered by Coastal Development Permit**						
Obtain CDFW Streambed Alteration Agreement for work in riparian corridor						
* Remove Cape ivy, English ivy, annual nasturtium, invasive grasses, passion vine, periwinkle, Himalayan blackberry. Remove Pittosporum and all invasive shrubs.	Restore native riparian habitat. Eradication or control of invasive plants and revegetation with native species	Hand pull or grub and bag all biomass. Remove vines of nasturtium before seed sets. Consider green flaming or foliar chemical application on ivy and passion vine	Temporary, significant ground disturbance with barren areas.	Immediately treat new shoots with herbicide or hand pull and bag for disposal.	Revegetate with plugs of Santa Barbara sedge, creeping wild rye or native blackberry. Install cuttings of arroyo willow and black cottonwood. Mulch exposed soils.	Reduction in extent and containment of vines in 5-10 years. Eradication of shrubs in 5-10 years. Increased cover of native Wetland and Riparian vegetation.
* Remove large eucalyptus and acacia and consider removing cypress.	Restore native Riparian habitat. Eradication of invasive plants, revegetation with native species	Fell trees and either grind or spot treat stumps with herbicide, grub out acacia seedlings.	Temporary significant ground disturbance with barren areas, increased light	Monitor areas with increased sunlight and remove invasives that recruit by hand pulling or foliar herbicide application	Revegetate tree area with arroyo willow and black cottonwood seedlings. Install plugs of Santa Barbara sedge and wild blackberry. Lightly mulch exposed soils with native chipped material	Eradication of invasive trees in 5-10 years
Work with CAWD staff and contractors to identify partnership opportunities to reduce invasive species along utility easement	Reduction of invasive species and restoration of native habitat					

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CENTRAL RIPARIAN – LONG-TERM ACTION *** Significant ground-disturbing work to be covered by Coastal Development Permit**						
Obtain CDFW Streambed Alteration Agreement for work in riparian corridor						
Remove dead redwoods	Reduce fuel loads and fire hazard, enhance Riparian habitat	Removal of dead wood at ground level	Temporary localized disturbance, potential for increased light	Monitor areas with increased sunlight and remove invasives that recruit	Plant cuttings of black cottonwood to maintain canopy.	On-going removal if redwood trees continue to die
* Remove Cape ivy, English ivy, annual nasturtium, invasive grasses, passion vine, periwinkle, Himalayan blackberry. Remove Pittosporum and all invasive shrubs.	Restore native Riparian and Wetland habitat Eradication or control of invasive plants and revegetation with native species	Hand pull or grub and bag all biomass. Remove vines of nasturtium before seed sets. Consider green flaming or foliar chemical application on ivy and passion vine	Temporary, significant ground disturbance with barren areas.	Immediately treat new shoots with herbicide or hand pull and bag for disposal.	Revegetate with plugs of Santa Barbara sedge, creeping wild rye or native blackberry. Install cuttings of arroyo willow and black cottonwood. Mulch exposed soils.	Reduction in extent and containment of vines in 5-10 years. Eradication of shrubs in 5-10 years. Increased cover of native Wetland and Riparian vegetation.
* Remove large eucalyptus and acacia and consider removing cypress.	Restore native riparian habitat. Eradication of invasive plants, revegetation with native species	Fell trees and either grind or spot treat stumps with herbicide, grub out acacia seedlings.	Temporary significant ground disturbance with barren areas, increased light	Monitor areas with increased sunlight and remove invasives that recruit by hand pulling or foliar herbicide application	Revegetate tree area with arroyo willow and black cottonwood seedlings. Install plugs of Santa Barbara sedge and wild blackberry. Lightly mulch exposed soils with native chipped material	Eradication of invasive trees in 5-10 years
UPPER FLANDERS TRAIL – LONG-TERM ACTION						
Remove German and Cape ivy infestations along trail and from adjacent Monterey Pine Forest habitat areas	Restore native understory in Monterey Pine Forest	Hand pull or grub, consider foliar application of herbicide	Temporary ground disturbance	Monitoring and continual removal of sprouts	Cover exposed soil areas with native duff or chipped material. Revegetate larger areas with Monterey pine seedlings and native understory species	Containment of ivy infestation in 5-10 years. On-going weed control will be required.

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UPPER CANYON – LONG-TERM ACTION *** Significant ground-disturbing work to be covered by Coastal Development Permit**						
Retain hydrological – geomorphic consultant to evaluate drainage and channel stability, and propose options to reduce stream bank failure and channel incision	Clear direction on causes of channel instability and remedial action to address on-going erosion.	Bio-mechanical erosion control utilizing native riparian vegetation. Consider potential uses of repurposed eucalyptus trunks for channel structures.				
Obtain CDFW Streambed Alteration Agreement for work in riparian corridor.						
* Remove Cape ivy, English ivy, annual nasturtium, invasive grasses, passion vine, periwinkle, Himalayan blackberry. Remove Pittosporum and all invasive shrubs.	Restore native Riparian habitat in canyon corridor. Eradication or control of invasive plants and revegetation with native species	Hand pull or grub and bag all biomass. Remove vines of nasturtium before seed sets. Consider green flaming or foliar chemical application on ivy and passion vine	Temporary, significant ground disturbance with barren areas.	Immediately treat new shoots with herbicide or hand pull and bag for disposal.	Revegetate with plugs of Santa Barbara sedge, creeping wild rye or native blackberry. Install cuttings of arroyo willow and black cottonwood. Mulch exposed soils.	Reduction in extent and containment of vines in 5-10 years. Eradication of shrubs in 5-10 years. Increased cover of native Wetland and Riparian vegetation.
* Remove large eucalyptus and acacia	Restore native Riparian habitat. Eradication of invasive plants, revegetation with native species	Fell trees and either grind or spot treat stumps with herbicide, grub out acacia seedlings.	Temporary significant ground disturbance with barren areas, increased light	Monitor areas with increased sunlight and remove invasives that recruit by hand pulling or foliar herbicide application	Revegetate tree area with arroyo willow and black cottonwood seedlings. Install plugs of Santa Barbara sedge and wild blackberry. Lightly mulch exposed soils with native chipped material	Eradication of invasive trees in 5-10 years

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ROUTINE MAINTENANCE ACTION						
Remove German and Cape ivy infestations, as well as all other invasive tree, shrub and forb species along internal trails and from adjacent natural habitat	Restore native understory in Monterey Pine Forest and Oak Woodland. Revegetate Coastal Scrub areas	Hand pull or grub, consider foliar application of herbicide	Temporary ground disturbance	Monitoring and regular removal of sprouts	Cover exposed soil areas with native duff or chipped material. Revegetate with appropriate native species	Containment of ivy infestation in 5-10 years. Eradication of misc. shrubs and forbs. On-going weed control will be required.
Monitor trails for erosion, damaged water bars, bridges and broken tree limbs	Reduction of erosion, trail safety	Use of hand tools		Monitoring and regular maintenance	Address as needed	Safe and stable trails, well-maintained infrastructure
Collaborate with CAWD, PG&E and other easement holders to address weed management issues	Coordination of vegetation management					
Collaborate with Friends group to address weed control and other Preserve management opportunities.	Coordination of vegetation and general Preserve management					
Collaborate with MEarth, local schools and other partners for assistance with weed control, revegetation and general Preserve management issues	Coordination of vegetation and general Preserve management.					
Manage and enhance Lester Rowntree Native Plant Garden	Sustainable, well-maintained native plant garden. Educational opportunity and potential plant conservation benefits	Hand pull or grub oak and pine seedlings. Remove all invasive non-native species	Regular monitoring as part of overall Preserve management	Utilize native chipped materials and native leaf litter. Remove dried or dead plant materials. Replace native specimens, as needed		Sustainable, well-maintained garden