

## 2017-2018 Mazama Pocket Gopher Action Plan

The purpose of this action plan is to identify the next-best conservation actions that can be conducted over the next 3-5 years to support MPG recovery.

Cat.	Ref. #	Task Synopsis (*=new item)	Rank	Status and Implementing Party (Options: Ongoing, In Progress, Planned, or No Action Yet)
1. Survey and Monitoring	1.1	<b>1. Develop a comprehensive survey/monitoring scheme to address probability of occurrence, assess site occupancy and abundance, and monitor trends at multiple scales.</b>	6	In Progress WDFW, USFWS, Thurston Co., JBLM, CNLM
	1.1.a	a. Conduct a workshop to review and discuss survey/monitoring methodologies.*		
	1.1.b	b. Identify the type, number and timing of surveys required to determine occupancy, including refining process to determine area occupied.		In Progress WDFW, FWS
	1.1.c	c. Identify the type, number and timing of surveys required to determine abundance and/or trends.		In Progress WDFW
	1.2	<b>2. Implement survey/monitoring scheme.</b>		
	1.2.a	a. Assess abundance and/or trends.		
	1.2.b	b. Develop area occupancy or specific distribution of Roy subsp. both on and off base.		In Progress at JBLM
	1.3	<b>3. Refine and update gopher distribution maps. Utilize WDFW Species Occurrence Database (WSDM).</b>		Ongoing (WDFW), USFWS, Thurston Co. JBLM, CNLM
2. Protect Existing Populations and Habitat	2.1	<b>1. Protect occupied habitat via land purchase, easements, voluntary conservation, etc.</b>	1	
	2.1.a	a. Develop and implement management agreements and/or plans for occupied sites. Pursue technical support and management plan development with public partners with occupied properties.		In Progress JBLM, WDFW, CNLM, FWS, Thurston Co, NRCS
	2.1.b	b. Develop opportunities to explicitly implement gopher protection through incentive programs and regulatory assistance (e.g. NRCS Farm Bill programs, county conservation districts, Voluntary Stewardship Program).		Ongoing NRCS, Thurston Co. VSP, South Sound Partners
	2.1.c	c. Pursue opportunities within existing programs to purchase occupied and highly suitable land (e.g. WWRP; ACUB; Section 6).		Ongoing South Sound Partners
	2.1.d	d. Explicitly include gophers/prairie habitat in incentive programs that support habitat protection, (e.g. ACEP, RCPP, WLFV).		Ongoing NRCS
	2.1.e	e. Ensure explicit gopher protections are included in agriculture easements and develop mechanism and resources to ensure protections are implemented (e.g. pilot projects through Sentinel Landscapes).		
	2.2	<b>2. Protect occupied habitat via regulation.</b>	2	
	2.2.a	a. Develop and implement short- and long-term strategies to address development pressure via regulation (e.g. mitigation banks, interim permitting strategy, in lieu fee, programmatic HCPs).		In Progress Thurston County, FWS, WDFW, CNLM, Tumwater
	2.2.b	b. Use programmatic approach to streamline implementation of regulatory process (e.g. Pierce County, Thurston County municipalities not under HCP, NRCS, WSDOT).		Ongoing USFWS, WDFW, Thurston Co., NRCS
	2.2.c	c. Assess effectiveness of habitat protection areas for gopher conservation (e.g., set-aside, mitigation bank).		Ongoing WDFW
	2.2.c.i	i. Develop conservation performance criteria and compliance monitoring measures for habitat protection areas established through HCPs and other programs		In Progress CNLM, USFWS, Thurston Co., WDFW
	2.3	<b>3. Identify priority conservation areas for MPG in Pierce County (e.g. Reserve Design).</b>		Ongoing USFWS, WDFW, Pierce Co.
	2.4	<b>4. Develop state and federal recovery plans with measurable objectives.</b>	13	Ongoing USFWS, WDFW
	2.5	<b>5. Implement debit/credit scheme under FWS/DOD ACUB MOU.</b>	7	In Progress USFWS and JBLM
3. Manage, Enhance, and Maintain Habitat	3.1	<b>1. Identify important habitat and landscape features.</b>	8	
	3.1.a	a. Identify vegetation structure and functional group composition favorable to Mazama pocket gophers (in context of overall prairie conservation and/or working lands enhancement).		
	3.1.b	b. Identify the level and type of disturbance (e.g. fire) beneficial to gophers and/or their habitat (e.g., source, frequency, intensity, duration, and spatial extent).		In Progress WDFW, JBLM, CNLM
	3.1.c	c. Determine relationship between gopher occurrence and soil type and structure.		Ongoing USFWS
	3.1.c.i	i. Explore feasibility of utilizing soil analysis to determine and map suitability (NRCS lead Habitat Potential Soil Interpretive Factors).*		Planned NRCS with South Sound Partners
	3.1.d	d. Identify landscape features (e.g. roads, corridors) that impact gopher dispersal and distribution.		
	3.2	<b>2. Develop spatially-explicit plans to restore, enhance, maintain habitat.</b>	5	
	3.2.a	a. Identify compatible/incompatible land uses (e.g. recreation, military training, grazing, prescribed fire, dispersal barriers) and redirect incompatible land use at high priority sites (e.g. JBLM, wildlife areas).		Ongoing JBLM, WDFW
	3.2.b	b. Explicitly include gophers in incentive programs that support habitat management (e.g. FWS Partners Program, NRCS Stewardship Programs/EQIP).		Ongoing FWS, NRCS
	3.3	<b>3. Implement habitat restoration, maintenance and enhancement.</b>	3	Ongoing
3.3.a	a. Assess site-specific habitat conditions to determine status and needed actions (e.g. vegetation composition and structure, soil, dispersal barriers, predation pressure).			
3.3.b	b. Control pest plants and increase habitat quality at occupied sites (e.g. trees, shrubs, pasture grasses).			
3.3.c	c. Expand occupied habitat through management (e.g. woody cover removal, increase forb cover, access control).			
	3.4	<b>4. Monitor and assess habitat objectives and gopher response to restoration actions.</b>	9	In Progress JBLM, CNLM, WDFW
		a. Evaluate feasibility/value of tree removal, including forest stands (e.g. density/canopy cover, stumps)*		In Progress JBLM, CNLM, WDFW
4. Increase Size & # of Populations	4.1	<b>1. Evaluate the range-wide need to increase numbers of populations. If needed, identify if this should be done (and how) through translocation or by increasing sizes of existing populations through habitat manipulations.</b>		Ongoing USFWS, WDFW
	4.2	<b>2. Identify and evaluate the tools to maximize conservation value on protected lands and minimize loss (e.g. corridor creation, translocation, habitat expansion).</b>		
5. Demographic s & Genetics	5.1	<b>1. Conduct demographic and genetic studies.</b>		
	5.1.a	a. Collect and analyze genetic information to inform management units (e.g. Yelm area).	11	WDFW
	5.1.b	b. Determine population vital rates (e.g., survival, reproduction, etc.) and factors that might affect those rates to inform determination of sustainable population size relative to habitat patch size and quality.		
6. Communications and Coordination	6.1	<b>1. Develop and implement a regional, cooperative communications strategy for multiple audiences.</b>	10	In Progress (see below)
	6.1.a	a. Conduct direct outreach to landowners of existing populations.		In Progress WDFW, Thurston Co., CNLM, CD. Planned Non-HCP jurisdictions.
	6.1.b	b. Improve public perception and understanding of gophers and gopher-related conservation actions through positive PR & other means.		In Progress SPS Communications Partnership
	6.1.c	c. Educate public on regulatory and incentive programs (e.g., ESA, CAO, HCP, Farm Bill, Futures).		Ongoing Thurston Co., NRCS, USFWS
	6.1.e	e. Update, clarify, and explicitly link private, federal, county and state online information (i.e. SouthSoundPrairies.org).		Ongoing CNLM
	6.2	<b>2. Maintain active working group, information sharing, and collaborative action.</b>	12	Ongoing CNLM, Partners
	6.3	<b>3. Develop/utilize a single coordinated database for MPG data (broader than just occurrence).</b>		South Sound Partners