

# Writing Goals & Objectives: From Vision to Action

## Strategic Approaches Cal-IPC Field Course

Andrea Williams, Vegetation Ecologist

October 28, 2015

San Diego, CA



MARIN MUNICIPAL  
WATER DISTRICT



# Goals and Objectives

- Terminology
- Why write objectives?
- Factors & considerations
- Writing objectives
- Types of objectives
- SMART objectives



MARIN MUNICIPAL  
WATER DISTRICT



# Terminology for today

**Goal:** How you want the world to be

**Objective:** A measurable, time-bounded statement of what you plan on changing about the world

**Strategy:** The way you plan on changing the world

**Tactic:** A tool/plan for changing the world



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Terminology

**Goal:** How you want the world to be  
(sometimes called **Vision** or **Mission**)



Example:  
To manage our natural resources in a sustainable manner and provide our customers with reliable, high-quality drinking water at a reasonable price.



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Terminology

**Objective:** A measurable, time-bounded statement of what you plan on changing about the world (sometimes called **Goal**)



Example:  
Reduce cover of French broom at Pine Point to 5% by 2019.



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# Terminology

**Strategy:** The way you plan on changing the world (sometimes called **Objective** or **Alternative**)



Example:  
Control French broom  
populations.



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Terminology

**Tactic:** A tool/plan for changing the world  
(sometimes called **Strategy**)

Example:  
Hand-pull using  
volunteers and  
crews.



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# Strategies and tactics

*How you achieve your goals and objectives*



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# Terminology for today

**Goal:** How you want the world to be

**Objective:** A measurable, time-bounded statement of what you plan on changing about the world

**Strategy:** The way you plan on changing the world

**Tactic:** A tool/plan for changing the world



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Why write objectives?

Objectives provide a measurable framework for putting your goals into action.



Invasive plant managers putting their goals into action



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Why write objectives?

Focus on the desired condition of the resource



Cal-IPC field course attendees writing goals and objectives



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Why write objectives?



Describe  
that condition



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# Why write objectives?

## Determine strategy



Example:  
Spray YST with  
herbicide  
Plan for follow-up  
treatment and  
monitoring



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Why write objectives?

Determine appropriate monitoring



Where's the  
knapweed?

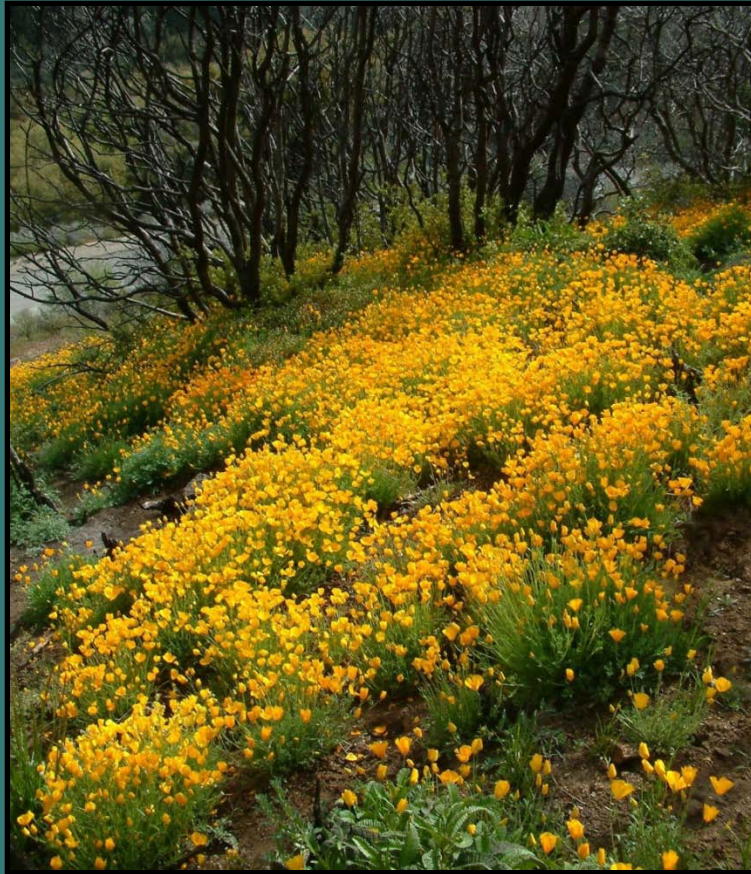


MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Why write objectives?



Provide a measurement for success.

Example:  
70% native plant cover 3 years post-treatment.



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Factors influencing goals

## Agency/reserve mission statements and mandates

Example: California State Parks' mission statement includes:

- “...protecting its most valued natural and cultural resources, and
- creating opportunities for high-quality outdoor recreation.”



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# Factors influencing goals

## State and federal laws

CEQA

NEPA

ESA

CESA

Clean Water Act

Historic Preservation Act



MARIN MUNICIPAL  
WATER DISTRICT

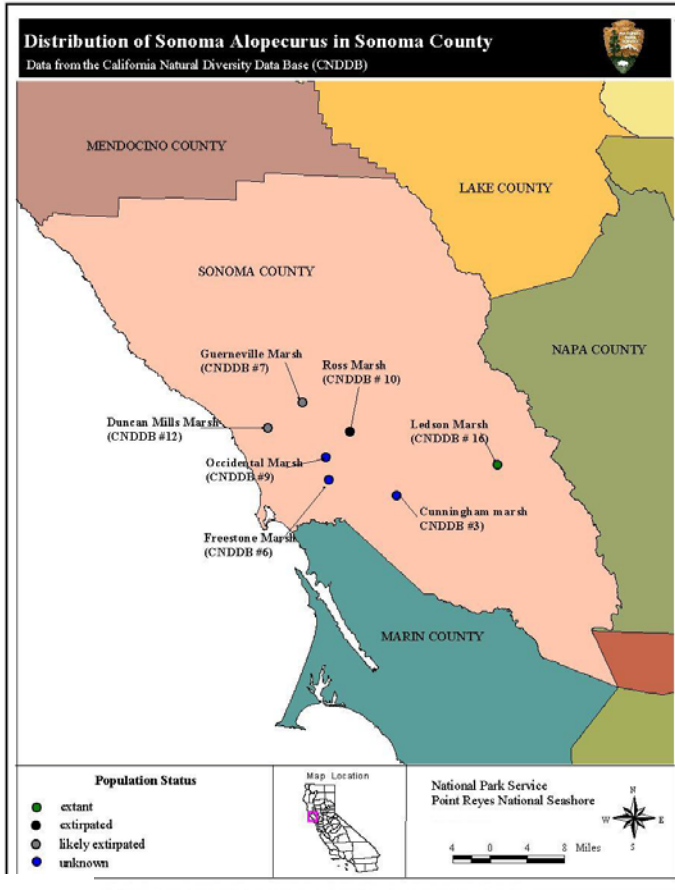


Cal-IPC

# Factors influencing goals

Current state of knowledge

Rare plant population distribution from CNDDDB



MARIN MUNICIPAL  
WATER DISTRICT



# Factors influencing goals

## Available resources



LABOR  
and  
FUNDING!

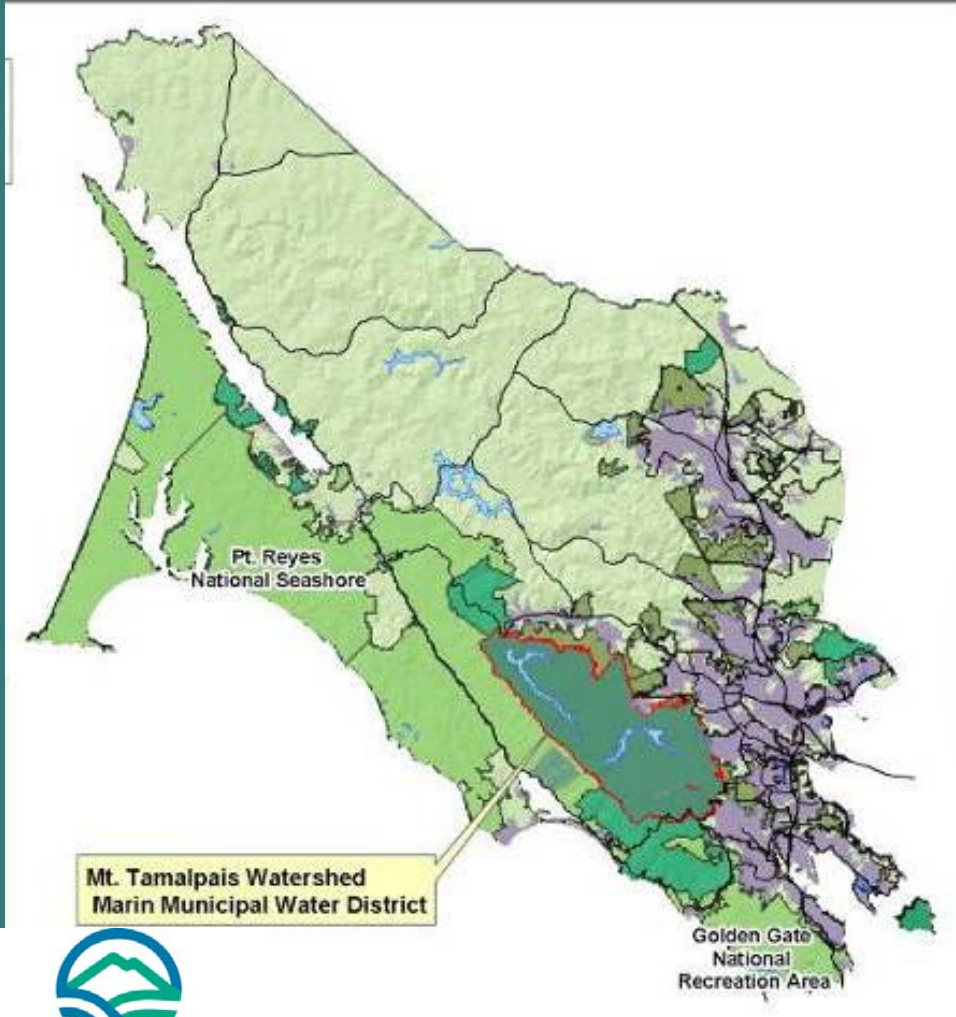


MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Case study: Mt Tamalpais watershed



Biodiversity hot spot

Home to at least 950 plant species



**MARIN MUNICIPAL  
WATER DISTRICT**





# Goal: Species Protection

Mt Tamalpais is a refuge for many species pushed to the brink of extinction.



# Impacts and stressors to consider



Nearly 12,000 homes are within a mile of the Watershed.



Fuelbreak maintenance



# Important considerations when planning

What do you want your lands to look like?

Do you know the state of them now?



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# Important considerations when planning



Are keeping  
broad  
processes or  
habitat values  
in place  
acceptable in  
some (exotic-  
dominated)  
areas?



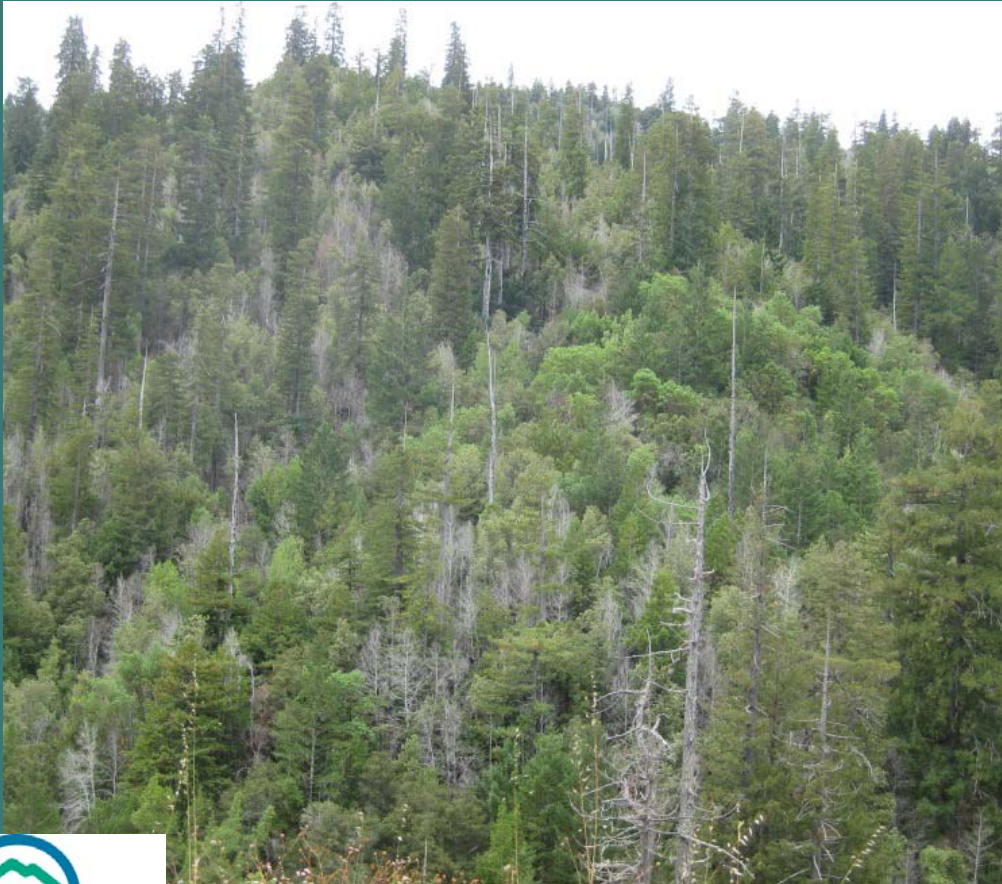
MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# Important considerations when planning



What can you  
change?



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Developing objectives

## 1. Prioritize sites and/or species



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# Developing objectives

2. Develop an ecological model (species biology, site history) for sites/species



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Developing objectives

## 3. Set targets/thresholds or change/trend



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# Developing objectives

## 4. Plan management and monitoring



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Developing objectives

5. Have an alternative response if objectives are not met



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# 5 aspects of an objective

1. What are you changing (species, site), where?
2. What aspect are you measuring?
3. How much change do you want to see?
4. In what direction?
5. Over what time period?





# Two types of objectives

## 1. Target/threshold:



- You have enough information to set a threshold
- You care about the **absolute condition** of the resource, not relative change over time

Threshold  
for success:  
70% native  
plant cover.



MARIN MUNICIPAL  
WATER DISTRICT





# Two types of objectives

## 2. Change/trend:

- You **don't** have enough information to set a threshold
- You care about **change over time**, not absolute condition of the resource



MARIN MUNICIPAL  
WATER DISTRICT



# SMART objectives

- S trategic
- M easurable
- A chievable/attainable
- R ealistic/results-oriented
- T ime-bounded/timely



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# SMART objectives

Strategic

Measurable



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# SMART objectives

- **A**chievable/attainable
- **R**ealistic/results-oriented



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



# SMART objectives

- Time-bounded/timely



Example:  
Extirpate all iceplant  
from along Hwy 1 in  
Santa Cruz County by  
2030.



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Objectives

Species:

Location:

Measurable attribute: biologically meaningful and efficient to measure

Desired trend/threshold:

Amount of change:

Timeframe:



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Objectives

Habitat type:

Location:

Measurable attribute:

Desired trend/threshold:

Amount of change:

Timeframe:



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Bad objectives

Broom-free by 2003!

Eradicate high-priority species from high-quality habitats.

Reduce cover of non-native species in Hiouchi Flat by 10% by 2020.

Restore Hetch-Hetchy!



MARIN MUNICIPAL  
WATER DISTRICT





# Good objectives

Extirpate barbed goatgrass from Pine Mountain by 2020.

Maintain ratio of native:non-native species cover at Potrero Meadow at 2010 levels through 2015.

Reduce cover of French broom at Pine Point to 5% by 2019.



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC

# Strategies and tactics

*How you want to get to your goals/objectives, and having a backup plan, sets you up for*

## ADAPTIVE MANAGEMENT



MARIN MUNICIPAL  
WATER DISTRICT



Cal-IPC



Thank You!

