# Possible Incremental Vegetation Management Activities in Response to the Drought

April 22nd, 2014

# Drought State of Emergency Overview

State of Emergency Declared by Governor Edmund G. Brown Jr.

- "We can't make it rain, but we can be much better prepared for the terrible consequences that California's drought now threatens * ."
- " * the risk of wildfires across the state is greatly increased * "
- "The California Department of Forestry and Fire Protection (CalFire) will hire additional seasonal firefighters to suppress wildfires and take other needed actions to protect public safety during this time of elevated fire risk."
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- SED letter related to declaration states "be aggressive to help reduce the risk of fires * "

Drought conditions creating potential for a large and devastating fire

- Fuel loading
- Vegetation is stressed and more prone to disease & decay

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# Possible Incremental Vegetation Management Initiatives



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| Enhanced Vegetation Inspections & Mitigation |
| Urban Wild Land Interface Protection |
| High Fire Risk Tree Identification & Mitigation |
| Fuel Reduction and Emergency Response Access |
| Early Detection of Forest Disease/Infestation |
| Early Detection and Response to Wildfires |

# Possible Initiatives

## Enhanced Vegetation Inspections and Mitigation

**Current Related Efforts:**

- As part of our routine vegetation management inspections, PG&E patrols all overhead high4voltage distributbn and transmission lines annually

**Proposed Additional Efforts in Response to the Drought:**

- Schedule 10420% additional patrols 4 expanding the frequency in targeted areas
- Red Flag and Pre/Event (Heat/Wind) Targeted Patrols
- Aerial Inspection of 6,700 miles in addition to routine patrol

**Estimated Incremental Cost:** $6M

## Urban Wild Land Interface Protection

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**Estimated Incremental Cost:** $1.7M

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**Estimated Incremental Cost:** $2M4$5M

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- Conduct additional fuel reduction work in other transmission and distribution right of way corridors in selected-fire risk areas to provide:
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    - Better access for firefighting activity.

**Estimated Incremental Cost:** $5M

# Possible Initiatives, cont.

## Early Detection of Forest Disease/Infestation

**Current Related Efforts:**

- PG&E – none. U.S. Forest Service (USFS), CalFire, and various universities and non4governmental organizatons (NGOs) conduct limited forest health monitoring, not necessarily in proximity to PG&E electric assets

**Proposed Additional Efforts in Response to the Drought:**

- Partner with USFS, CalFire, universities, and NGOs monitoring forest health to identify data gaps, offer data collection cost share opportunities near PG&E's electric assets, and use information to augment annual work

**Estimated Incremental Cost:** $2M4$5M

## Early Detection and Response to Wildfires

**Current Related Efforts:**

- PG&E – none. Current state agency detection and response efforts to fires include watch towers, CalFire fire detection flights, and other conventional methods, but without a specific focus on protecting utility facilities.

**Proposed Additional Efforts in Response to the Drought:**

- Partner with state and federal agencies such as USFS, CalFire, State Parks, National Park Service, and the Bureau of Land Management to provide funding for added personnel at currently unmanned critical fire lookout towers near PG&E facilities, additional fire detection flights along power lines, and standby fire suppression crews while agency resources are engaged on large fires.
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- Create a mutual alert system between PG&E and agencies, directing them to areas critical to PG&E

**Estimated Incremental Cost:** $3M

# Possible Incremental Vegetation Management Activities in Response to the Drought

April 22nd, 2014

# Drought State of Emergency Overview

State of Emergency Declared by Governor Edmund G. Brown Jr.

- "We can't make it rain, but we can be much better prepared for the terrible consequences that California's drought now threatens * ."
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| Enhanced Vegetation Inspections & Mitigation |
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| High Fire Risk Tree Identification & Mitigation |
| Fuel Reduction and Emergency Response Access |
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## Enhanced Vegetation Inspections and Mitigation

**Current Related Efforts:**

- As part of our routine vegetation management inspections, PG&E patrols all overhead high4voltage distributbn and transmission lines annually

**Proposed Additional Efforts in Response to the Drought:**

- Schedule 10420% additional patrols 4 expanding the frequency in targeted areas
- Red Flag and Pre/Event (Heat/Wind) Targeted Patrols
- Aerial Inspection of 6,700 miles in addition to routine patrol

**Estimated Incremental Cost:** $6M

## Urban Wild Land Interface Protection

**Current Related Efforts:**

- PG&E has identified certain high risk fire areas in urban areas of Marin, the East Bay, and a few other fire risk areas. In these areas, PG&E conducts additional patrols to identify and mitigate any identified hazards

**Proposed Additional Efforts in Response to the Drought:**

- Work in collaboration with Local Fire Agencies and Fire Safe Councils to prioritize additional high risk fire areas within urban areas in other parts of our service territory

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    - Trees that may have developed a threat to the lines (broken limbs or sudden disease) since the last annual patrol

**Estimated Incremental Cost:** $1.7M

# Possible Initiatives, cont.

## High Fire Risk Tree Identification and Mitigation

**Current Related Efforts:**

- PG&E currently identifies high fire risk trees using LiDAR on selected NERC transmission lines

**Proposed Additional Efforts in Response to the Drought:**

- Expand hazard trees identification in selected high fire danger areas to additional overhead transmission and distribution assets by application of new techniques. Hazard identification techniques may include LiDAR, Hyperspectral Imaging and ground4based tree evaluation methods not typically usedin routine vegetation management operations

**Estimated Incremental Cost:** $10M

## Fuel Reduction and Emergency Response Access

**Current Related Efforts:**

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## Early Detection of Forest Disease/Infestation

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**Estimated Incremental Cost:** $2M4$5M

## Early Detection and Response to Wildfires

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**Estimated Incremental Cost:** $3M

# Possible Incremental Vegetation Management Activities in Response to the Drought

April 22nd, 2014

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**Current Related Efforts:**

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**Estimated Incremental Cost:** $6M

## Urban Wild Land Interface Protection

**Current Related Efforts:**

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**Estimated Incremental Cost:** $1.7M

# Possible Initiatives, cont.

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**Current Related Efforts:**

- PG&E currently identifies high fire risk trees using LiDAR on selected NERC transmission lines

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April 22nd, 2014

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April 22nd, 2014

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