

Maintaining Facility Reliability in a Sea of Change

Baywork

Maintenance & Asset Management Workshop

April 2015

Bob Marsheck

Alameda County Water District

Fremont, Newark and Union City
Serve population of 340,000



Why are we Here?

“It is the mission of the Alameda County Water District to provide a reliable supply of high quality water at a reasonable price to our customers.”

**“An ounce of prevention is worth a pound of cure”
– Ben Franklin**

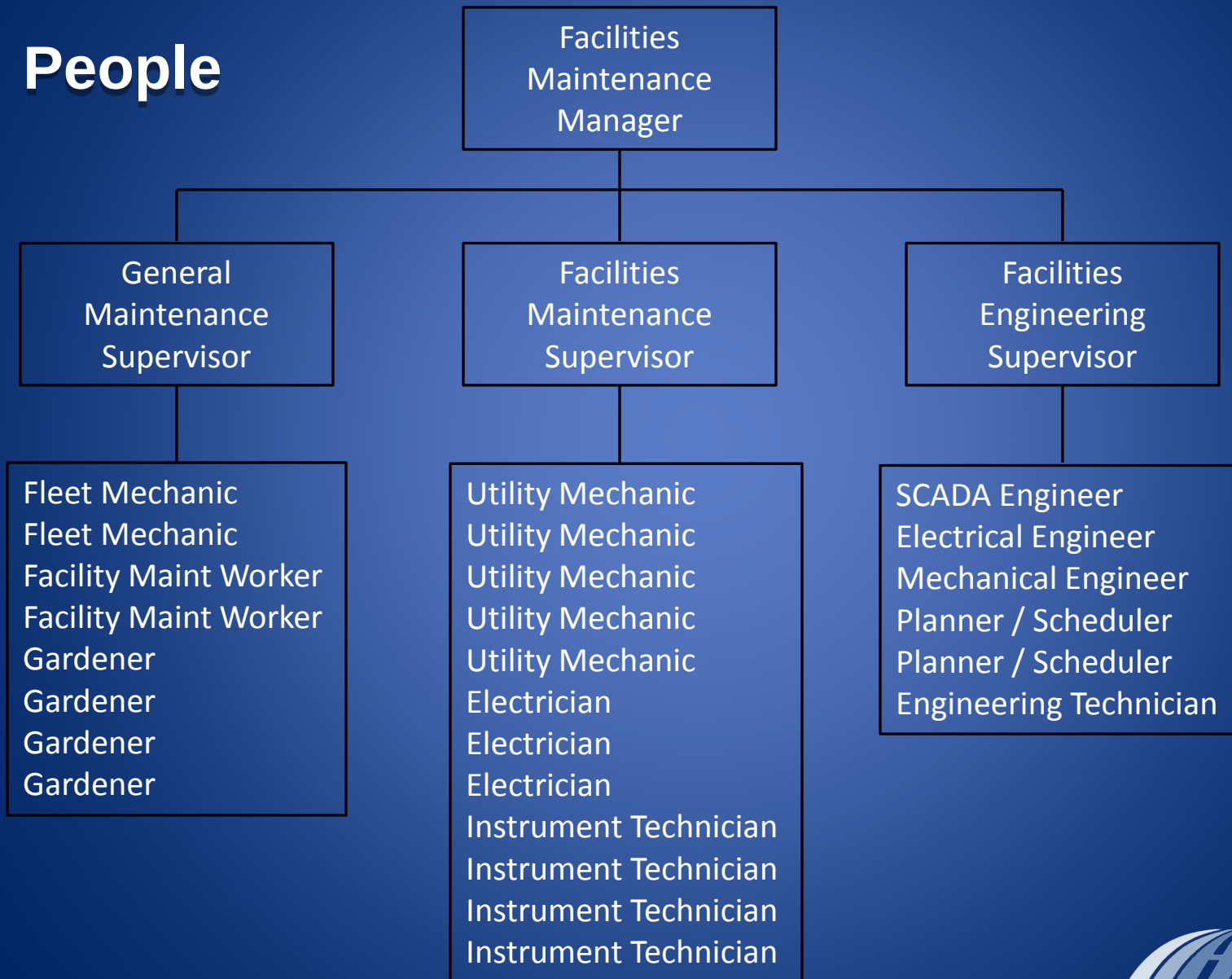
. . . a Sea of Change

People
and
Processes



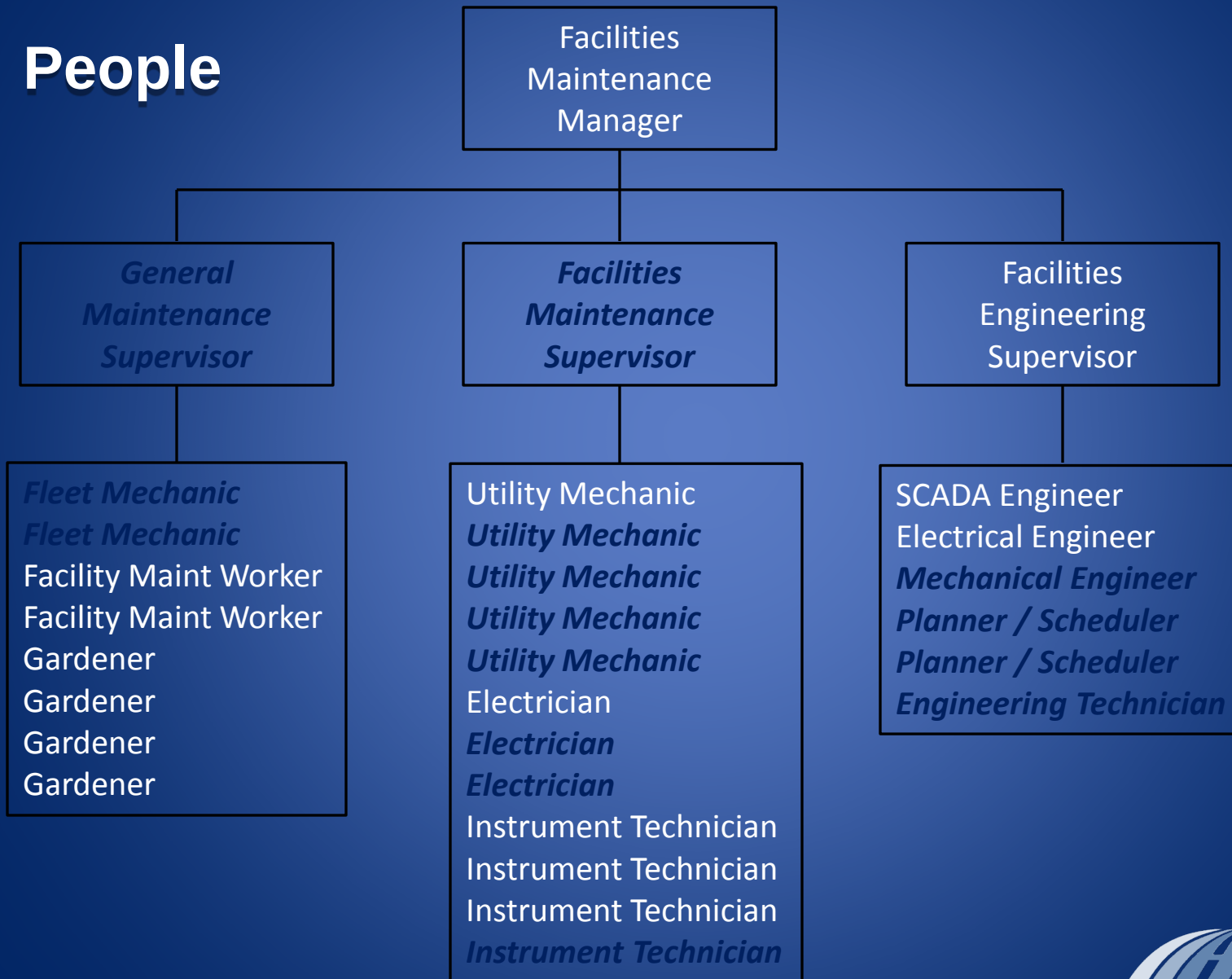
. . . a Sea of Change

People



. . . a Sea of Change

People



. . . a Sea of Change

Processes

- **Enterprise Resource Software – major change**
 - **Asset management**
 - **Work orders**
 - **Purchasing**
 - **Time entry**
 - **Financials**

Maintaining Facility Reliability . . .

Training

Utility Mechanics, Electricians, Instrument Technicians

- Work Processes
- Regulations
- Technical



Maintaining Facility Reliability . . .

Maintenance Planning & Scheduling

Facilities Maintenance													Weekly Schedule																																																									
Employee	Monday 13 April 2015														Tuesday 14 April 2015														Wednesday 15 April 2015														Thursday 16 April 2015														Friday 17 April 2015													
First	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5																						
Janusz	🛑 Off														😄 Vacation														😄 Vacation														😄 Vacation														😄 Vacation													
Mike	Corrective Maintenance Scott Creek Booster Prep Alameda Alt. Valve														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Mechanical P/Ms Paseo Padre M6YR													
Ted	🛑 Off														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Mechanical A Priority WO													
Robert	Corrective Maintenance Scott Creek Booster Prep Alameda Alt. Valve														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Mechanical P/Ms Paseo Padre M6YR													
Ron	Mechanical A Priority WO / Fill														Mechanical A Priority WO / Fill														Mechanical A Priority WO / Fill														Mechanical A Priority WO / Fill														🛑 Off													
Voltaire	😄 Vacation														😄 Vacation														😄 Vacation														😄 Vacation														😄 Vacation													
Bill	Corrective Maintenance Mowry Switch Gear Battery Charger WO# 63926														Electrical A Priority WO / Fill														Electrical A Priority WO / Fill														Electrical A Priority WO / Fill														🛑 Off													
Danny	Corrective Maintenance Curtner P-1														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Project TP2 EQ Basin VFD Hour Meters													
Roberto	🛑 Off														Instrument P/Ms Scada Computers 1 YR PM's WO# 641836														Instrument P/Ms Scada Computers 1 YR PM's WO# 641836														Instrument P/Ms														Instrument A Priority WO / Fill													
Tim	Instrument P/Ms Blender														Instrument P/Ms Blender														Instrument P/Ms Desal														Instrument P/Ms Desal														Instrument P/Ms Desal													
Justin	Instrument A Priority WO / Fill														Instrument A Priority WO / Fill														Instrument A Priority WO / Fill														Instrument A Priority WO / Fill														🛑 Off													
Dave	🛑 Off														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Corrective Maintenance Scott Creek Booster Outage														Instrument P/Ms Distribution													

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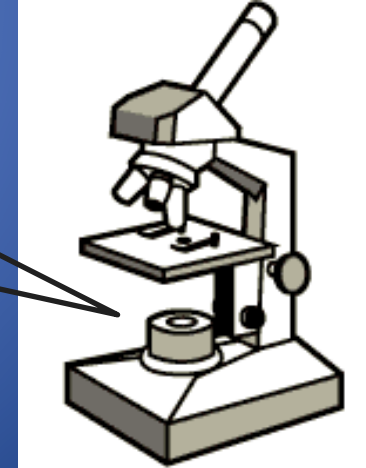
Preventive Maintenance



Maintaining Facility Reliability . . .

Facility Assessments

- ***Regulator Stations***
- Booster Stations
- Storage Facilities
- Take-Offs
- Production Facilities



Maintaining Facility Reliability . . .

- Training the Trades
- Maintenance Planning & Scheduling
- Preventive Maintenance
- Facility Assessments

Challenges and Next Steps

- **Staffing**
- **Culture Change**
- **Focus**
- **Persistence**

Thank you.

Bob Marsheck