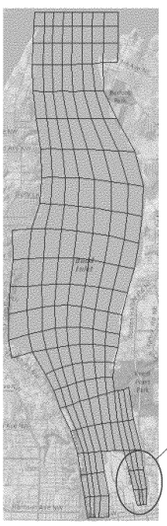
Budd Inlet Dissolved Oxygen TMDL

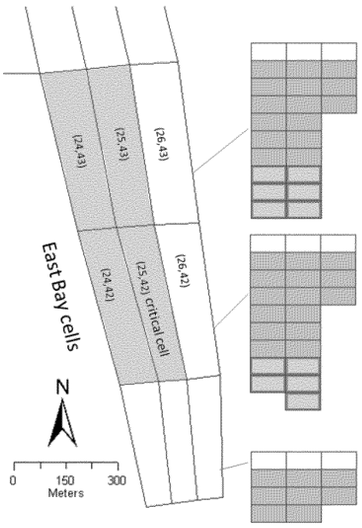
September 15
Advisory Committee Update

Budd Inlet Modeling

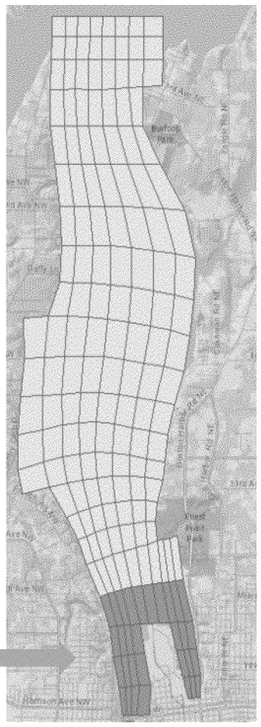
303(d)
listing grids



Budd Inlet
Model



Outer Budd Inlet: **6** mg/L

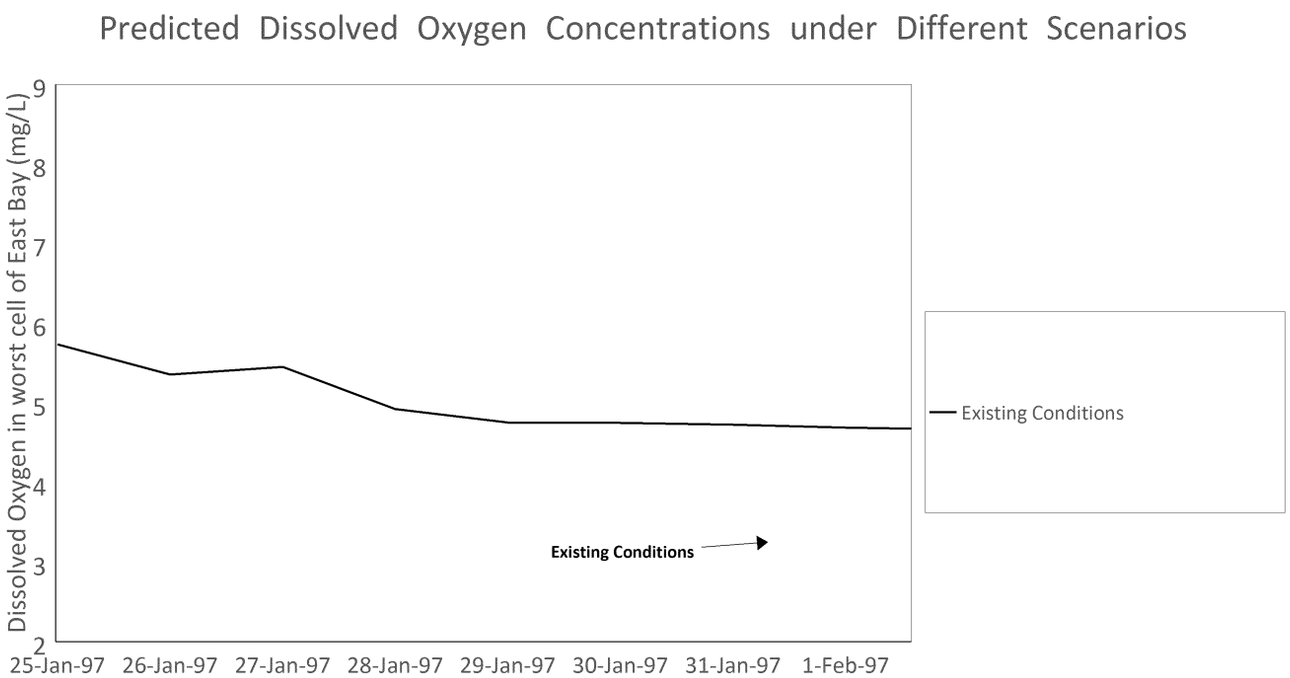


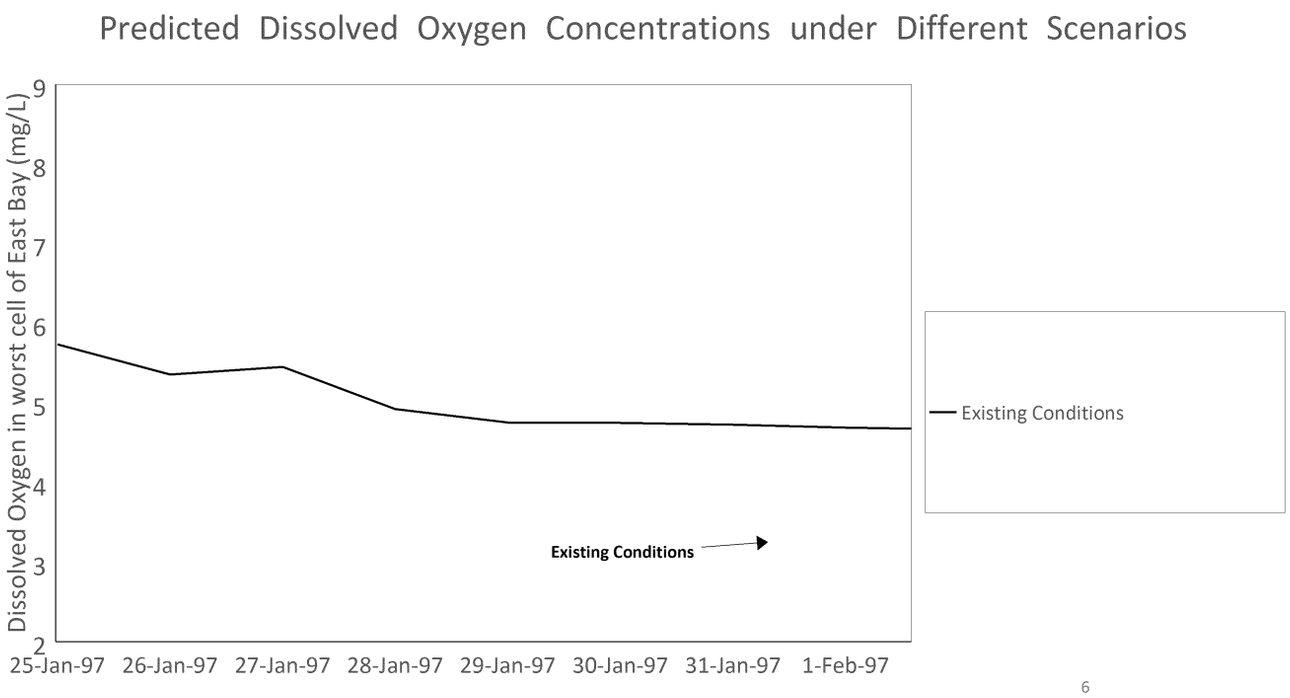
Inner Budd Inlet: **5** mg/L

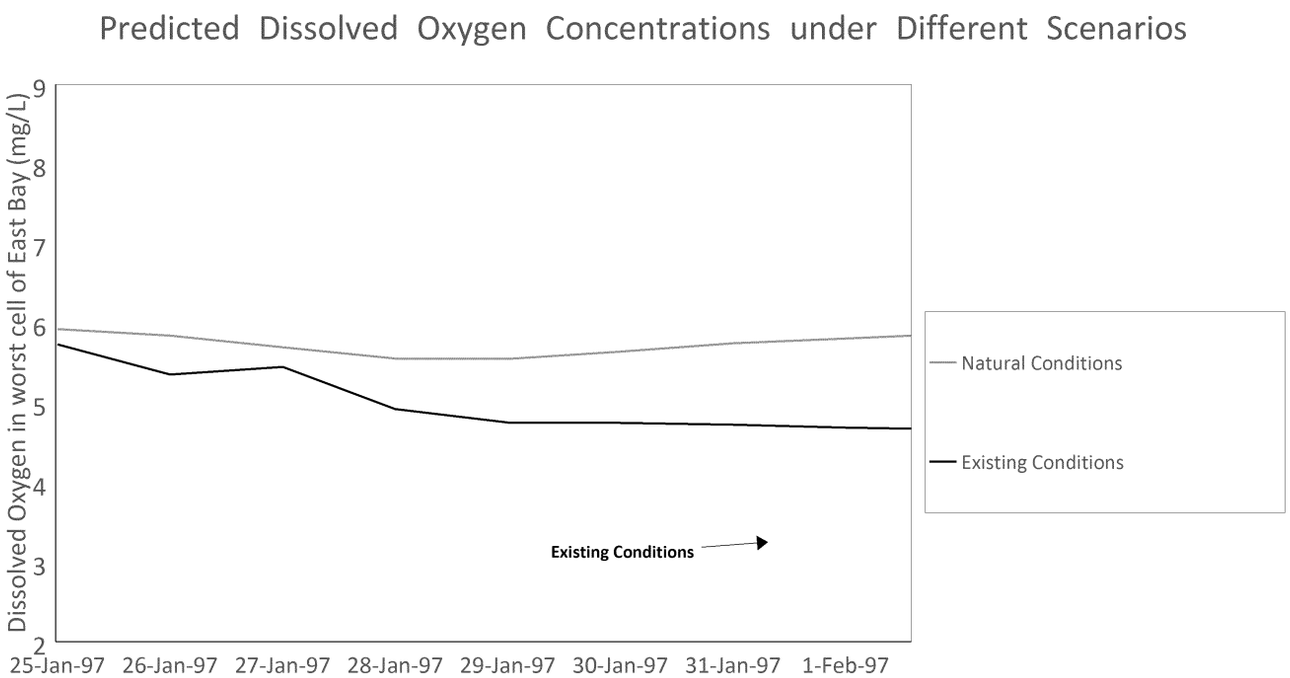
Water Quality Standards

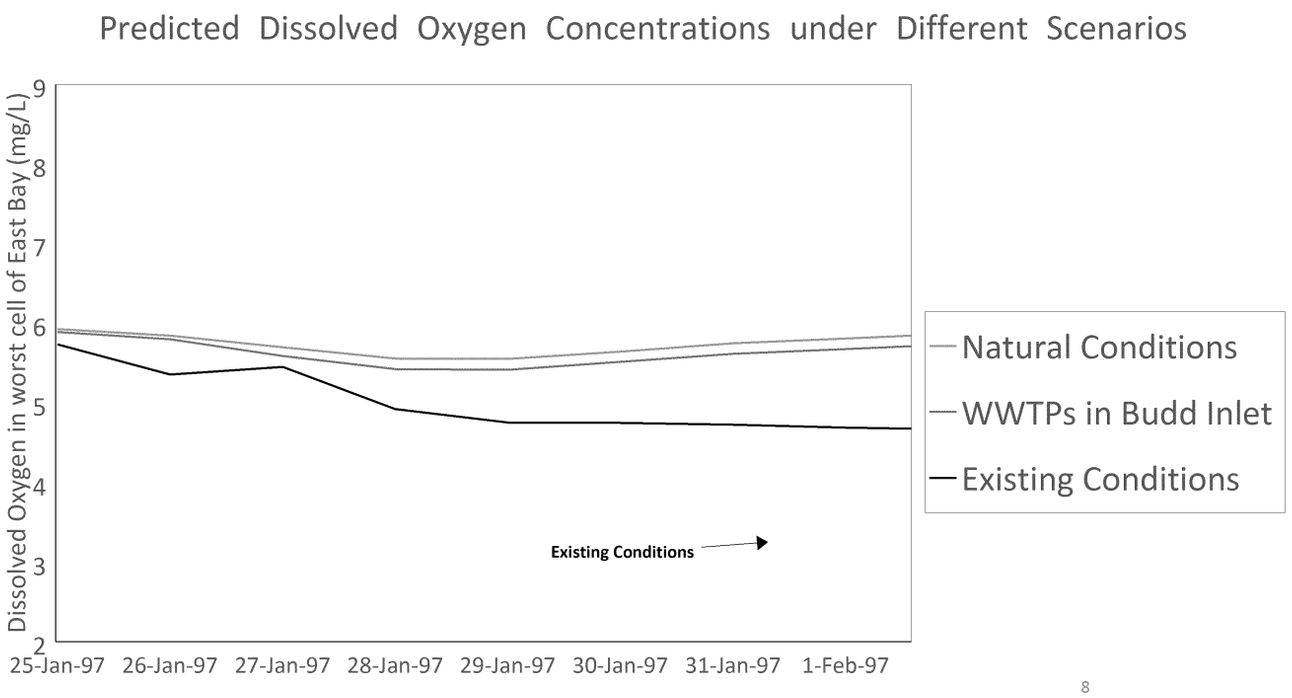
If natural conditions are below the standard, humans **cannot** deplete the DO by more than 0.2 mg/L.

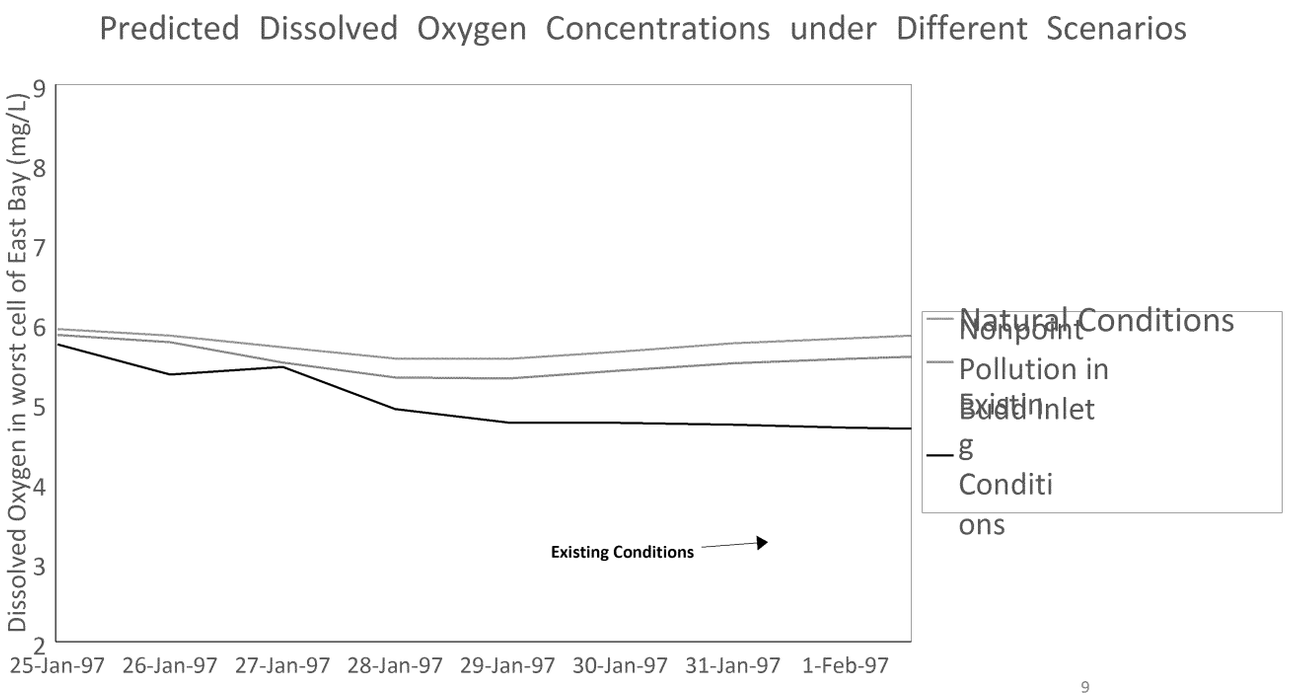
Predicted Dissolved Oxygen Concentrations under Different Scenarios

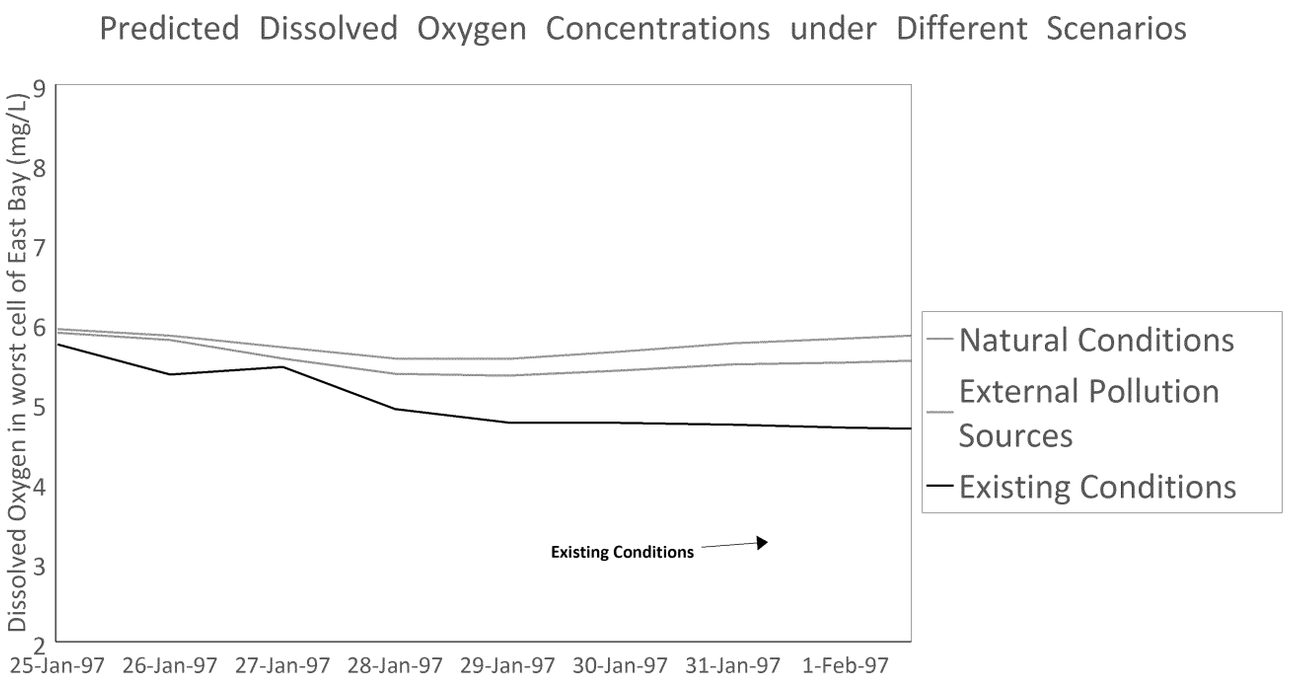

Predicted Dissolved Oxygen Concentrations under Different Scenarios
Dissolved Oxygen in worst cell of East Bay (mg/L)
9
8
7
6
5
4
3
2
25-Jan-97
26-Jan-97
27-Jan-97
28-Jan-97
29-Jan-97
30-Jan-97
31-Jan-97
1-Feb-97
Existing Conditions
Existing Conditions

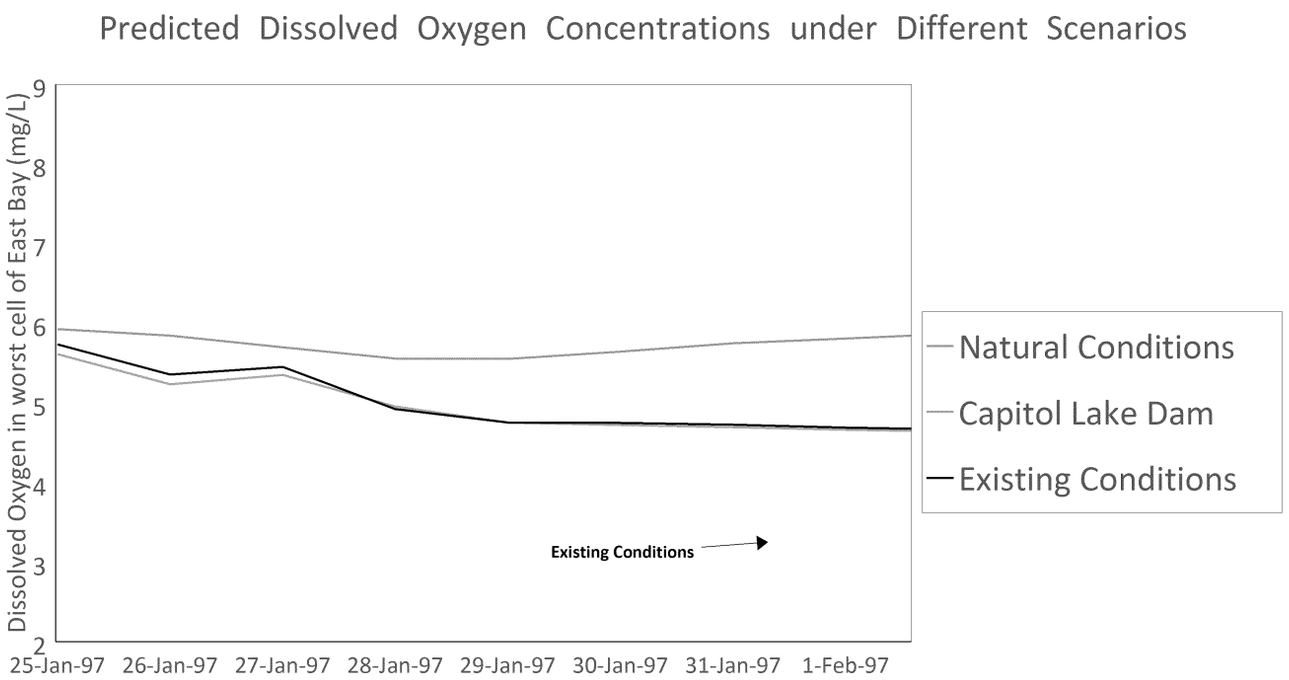

Predicted Dissolved Oxygen Concentrations under Different Scenarios
Dissolved Oxygen in worst cell of East Bay (mg/L)
9
8
7
6
5
4
3
2
25-Jan-97
26-Jan-97
27-Jan-97
28-Jan-97
29-Jan-97
30-Jan-97
31-Jan-97
1-Feb-97
Existing Conditions
Existing Conditions

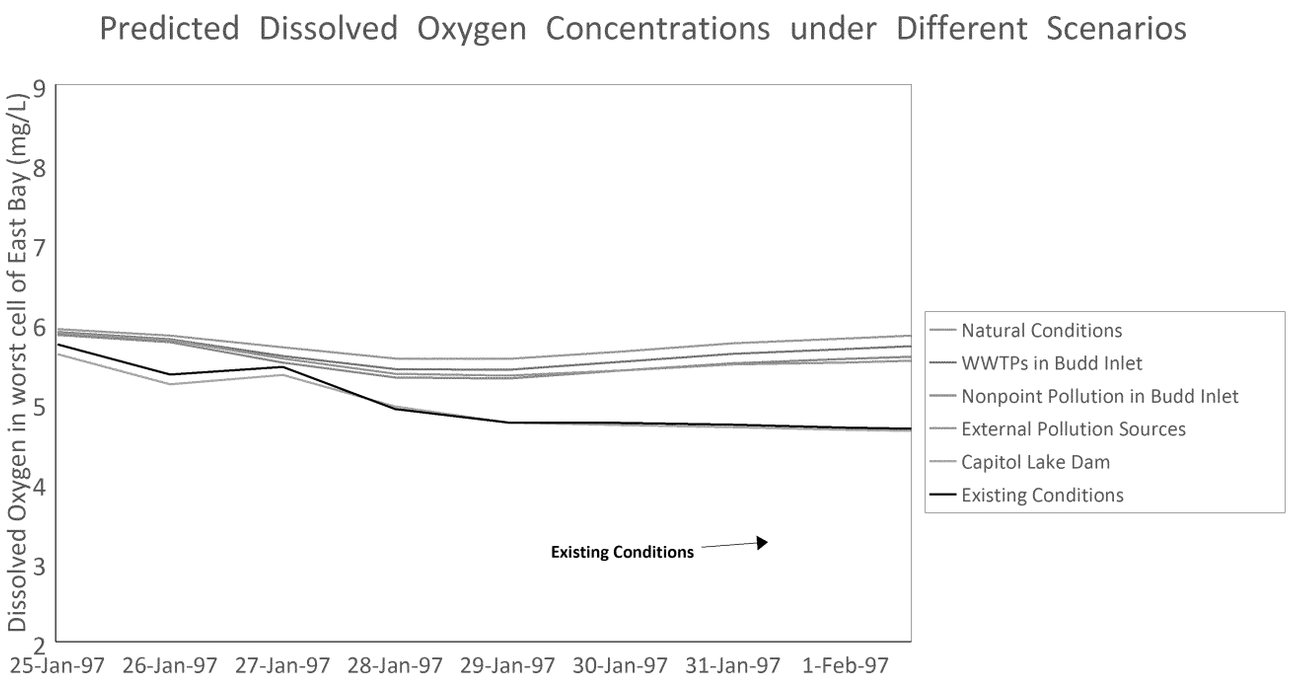

Predicted Dissolved Oxygen Concentrations under Different Scenarios
Dissolved Oxygen in worst cell of East Bay (mg/L)
9
8
7
6
5
4
3
2
25-Jan-97
26-Jan-97
27-Jan-97
28-Jan-97
29-Jan-97
30-Jan-97
31-Jan-97
1-Feb-97
Existing Conditions
Natural Conditions
Existing Conditions

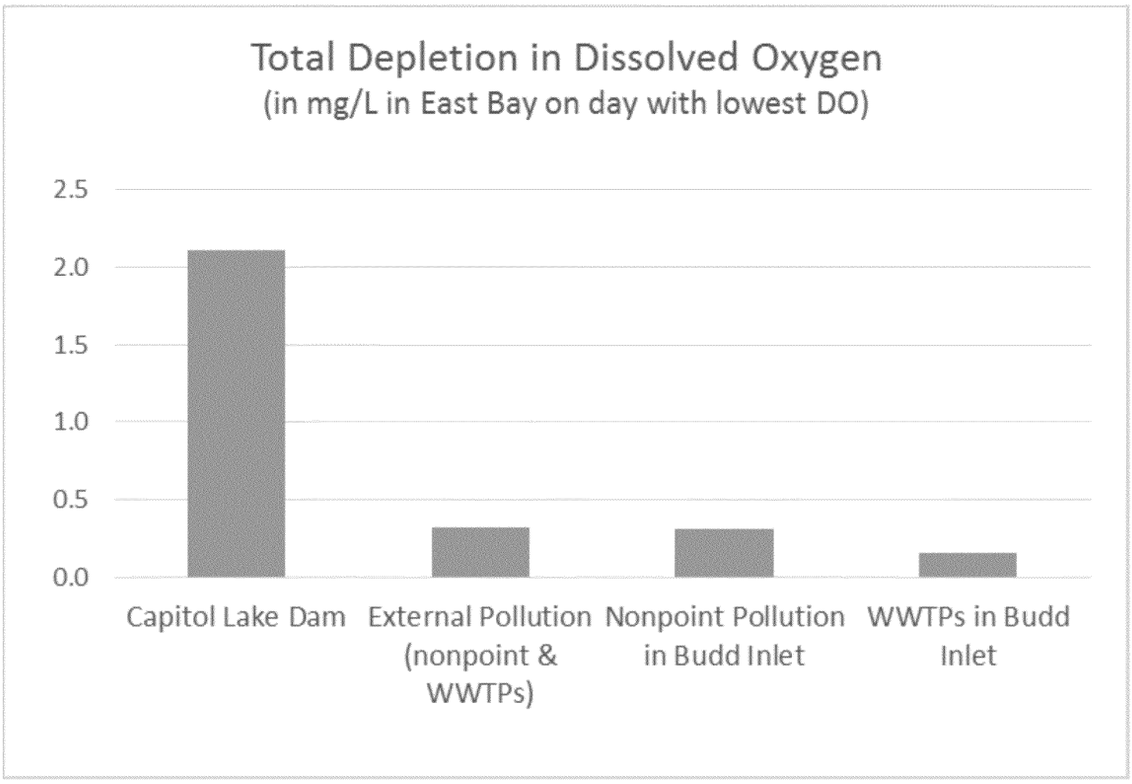

Predicted Dissolved Oxygen Concentrations under Different Scenarios
Dissolved Oxygen in worst cell of East Bay (mg/L)
9
8
7
6
5
4
3
2
25-Jan-97
26-Jan-97
27-Jan-97
28-Jan-97
29-Jan-97
30-Jan-97
31-Jan-97
1-Feb-97
Existing Conditions
Natural Conditions
WWTPs in Budd Inlet
Existing Conditions


Predicted Dissolved Oxygen Concentrations under Different Scenarios
Dissolved Oxygen in worst cell of East Bay (mg/L)
9
8
7
6
5
4
3
2
25-Jan-97
26-Jan-97
27-Jan-97
28-Jan-97
29-Jan-97
30-Jan-97
31-Jan-97
1-Feb-97
Existing Conditions
Natural Conditions
Nonpoint Pollution in Budd Inlet
Existing Conditions


Predicted Dissolved Oxygen Concentrations under Different Scenarios
Dissolved Oxygen in worst cell of East Bay (mg/L)
9
8
7
6
5
4
3
2
25-Jan-97
26-Jan-97
27-Jan-97
28-Jan-97
29-Jan-97
30-Jan-97
31-Jan-97
1-Feb-97
Existing Conditions
Natural Conditions
External Pollution Sources
Existing Conditions


Predicted Dissolved Oxygen Concentrations under Different Scenarios
Dissolved Oxygen in worst cell of East Bay (mg/L)
9
8
7
6
5
4
3
2
25-Jan-97
26-Jan-97
27-Jan-97
28-Jan-97
29-Jan-97
30-Jan-97
31-Jan-97
1-Feb-97
Existing Conditions
Natural Conditions
Capitol Lake Dam
Existing Conditions


Predicted Dissolved Oxygen Concentrations under Different Scenarios
Dissolved Oxygen in worst cell of East Bay (mg/L)
9
8
7
6
5
4
3
2
25-Jan-97
26-Jan-97
27-Jan-97
28-Jan-97
29-Jan-97
30-Jan-97
31-Jan-97
1-Feb-97
Existing Conditions
Natural Conditions
WWTPs in Budd Inlet
Nonpoint Pollution in Budd Inlet
External Pollution Sources
Capitol Lake Dam
Existing Conditions


Total Depletion in Dissolved Oxygen
(in mg/L in East Bay on day with lowest DO)
2.5
2.0
1.5
1.0
0.5
0.0
Capitol Lake Dam
External Pollution (nonpoint & WWTPs)
Nonpoint Pollution in Budd Inlet
WWTPs in Budd Inlet