

Lake Osoyoos Study 4: Effects of Zosel Dam on Water Quality



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Acknowledgments

Michael Sokal and Vic Jensen, BC Ministry of Environment

Mark McKenney and Alicia Osland, Osoyoos Lake Water Quality Society

Dan Sherratt, Washington State Department of Ecology Environmental Assessment Program

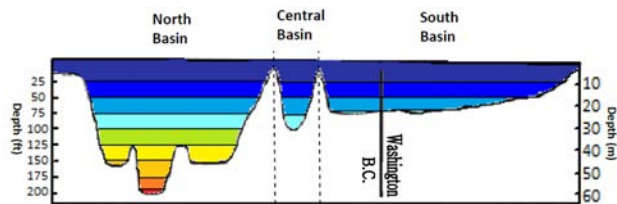
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 Water quality trends in Okanagan, Skaha and Osoyoos
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 "Controls on Osoyoos Lake Limnology and Biological Production"
 Osoyoos Lake Water Science Forum http://www.obwb.ca/fileadmin/docs/osoyoos_lake/04_Hyatt_Kim_limnology.pdf

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 "Water quality trends in Okanagan, Skaha and Osoyoos Lakes in response
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http://www.obwb.ca/fileadmin/docs/osoyoos_lake/02_Jensen_Vic_waterquality.pdf



Osoyoos Lake's Three Basins



"Take Home" Message

1. Water quality has improved substantially since 1970s
2. Summer bottom waters are void of oxygen
3. Water quality correlates weakly with inflow
4. Internal nutrient loading may affect water quality
5. Zosel Dam has minor effect on depth and flow rate
6. Dam operations are not a primary factor affecting water quality

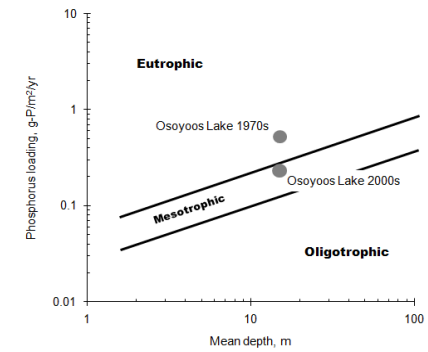


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Vollenweider Plot

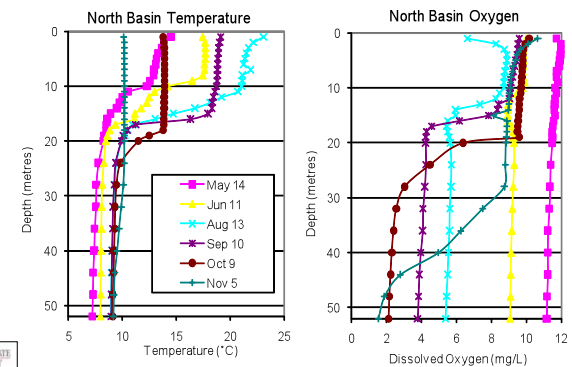


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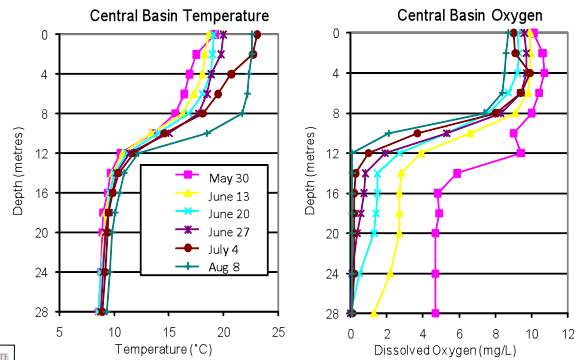
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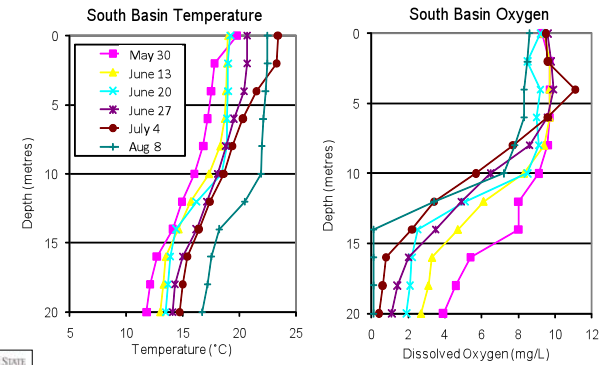
North Basin Temp and DO



Central Basin Temp and DO



South Basin Temp and DO

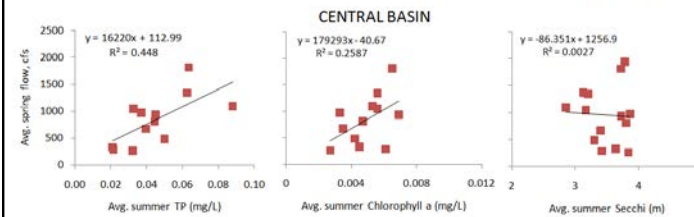


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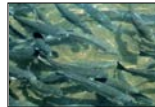


Inflow and Water Quality

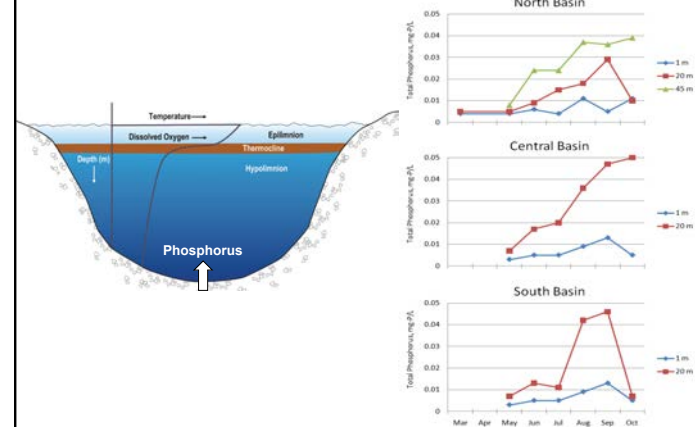


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Fall Phosphorus Accumulation

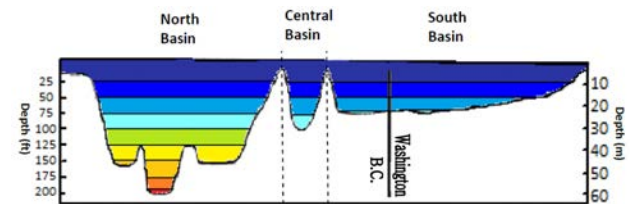


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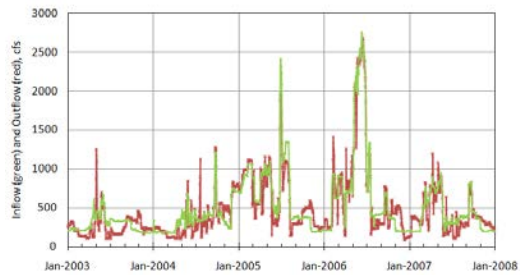
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Depth in Osoyoos Lake



Inflow and Outflow in Osoyoos Lake

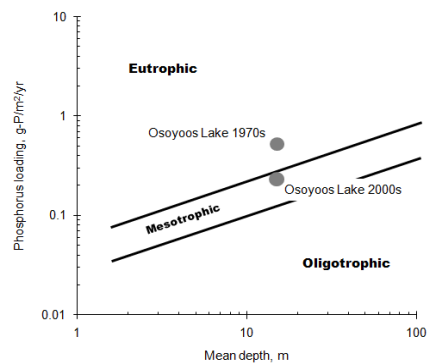


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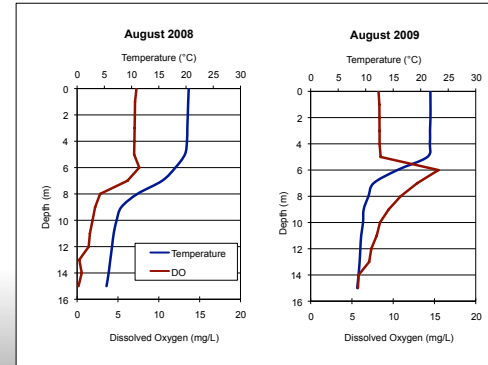
Lake Oxygenation in Twin Lakes, Washington



Line Diffuser Oxygenation



Before and After Oxygenation



Thank You

