# SWM – 1 February

Tim Weiskel Water

The "Big Picture" on the only Blue Planet in the known universe...

# Let's take a "big picture view" of WATER



## There is something wrong on this water wealthy planet.



## There is something wrong on this water wealthy planet.

We live on the only blue planet in the known universe...



## There is something wrong on this water wealthy planet.

We live on the only blue planet in the known universe... ... yet as a species we may be "running out" of water.

We need to address the ethical, scientific, public health, and policy dimensions of this crisis...

... urgently and

very soon....

We need to address the ethical, scientific, public health, and policy dimensions of this crisis...

... urgently and

very soon....

...to avoid massive human suffering.



#### The more distance we get on this "blue marble..." in space...



The more distance we get on this "blue marble..." in space... ....the more we realize it is our only "home"



The more distance we get on this "blue marble..." in space... ....the more we realize it is our only "home"



in a vast, cold and expanding universe ....



### "That image of the earth has become, like the Cross and the Crescent, an icon of almost religious significance."

James Lovelock, 1996

## So, in the "big picture" it appears that ... There is something wrong on this water wealthy planet...



## So, in the "big picture" it appears that ... There is something wrong on this water wealthy planet...

What is wrong?





## So, in the "big picture" it appears that ... There is something wrong on this water wealthy planet...

What is wrong?





What can be done?





#### Water

• Two thirds of the world is covered with water

Tim Weiskel - 17

#### Water

- Two thirds of the world is covered with water
- 97% of that water is salt water

Tim Weiskel - 18

#### Water

- Two thirds of the world is covered with water
- 97% of that water is salt water
- Of the remaining 3% that is fresh water, roughly, 2/3 of that is locked up in the polar ice sheets.

#### Water

- Two thirds of the world is covered with water
- 97% of that water is salt water
- Of the remaining 3% that is fresh water, roughly, 2/3 of that is locked up in the polar ice sheets.
- The world's population is competing in increasingly vicious rivalries for the use of the remaining 1% of water on the planet.

#### Water

- Two thirds of the world is covered with water
- 97% of that water is salt water
- Of the remaining 3% that is fresh water, roughly, 2/3 of that is locked up in the polar ice sheets.
- The world's population is competing in increasingly vicious rivalries for the use of the remaining 1% of water on the planet.

#### Water

- Two thirds of the world is covered with water
- 97% of that water is salt water
- Of the remaining 3% that is fresh water, roughly, 2/3 of that is locked up in the polar ice sheets.
- The world's population is competing in increasingly vicious rivalries for the use of the remaining 1% of water on the planet.

Tim Weiskel - 22

• Agriculturalists - water is irrigation

- Agriculturalists water is irrigation
- Industrialists water is input to industrial process

- Agriculturalists water is irrigation
- Industrialists water is input to industrial process
- Municipal authorities deal with "drinking water" and "sewage."

- Agriculturalists water is irrigation
- Industrialists water is input to industrial process
- Municipal authorities deal with "drinking water" and "sewage."
- Energy Companies water as a source of power or coolant for nuclear...

- Agriculturalists water is irrigation
- Industrialists water is input to industrial process
- Municipal authorities deal with "drinking water" and "sewage."
- Energy Companies water as a source of power or coolant for nuclear...
- Environmentalists water is basis of wetlands and vital to ecosystemic health

- Agriculturalists water is irrigation
- Industrialists water is input to industrial process
- Municipal authorities deal with "drinking water" and "sewage."
- Energy Companies water as a source of power or coolant for nuclear...
- Environmentalists water is basis of wetlands and vital to ecosystemic health

Emerging Conflicts:

- Agriculturalists water is irrigation
- Industrialists water is input to industrial process
- Municipal authorities deal with "drinking water" and "sewage."
- Energy Companies water as a source of power or coolant for nuclear...
- Environmentalists water is basis of wetlands and vital to ecosystemic health

Emerging Conflicts:

Small farm agriculture vs. corporate agriculture

- Agriculturalists water is irrigation
- Industrialists water is input to industrial process
- Municipal authorities deal with "drinking water" and "sewage."
- Energy Companies water as a source of power or coolant for nuclear...
- Environmentalists water is basis of wetlands and vital to ecosystemic health

Emerging Conflicts:

Small farm agriculture vs. corporate agriculture drinking water vs. agriculture

- Agriculturalists water is irrigation
- Industrialists water is input to industrial process
- Municipal authorities deal with "drinking water" and "sewage."
- Energy Companies water as a source of power or coolant for nuclear...
- Environmentalists water is basis of wetlands and vital to ecosystemic health

Emerging Conflicts:

Small farm agriculture vs. corporate agriculture drinking water vs. agriculture Sanitation (humans vs. microbes)

- Agriculturalists water is irrigation
- Industrialists water is input to industrial process
- Municipal authorities deal with "drinking water" and "sewage."
- Energy Companies water as a source of power or coolant for nuclear...
- Environmentalists water is basis of wetlands and vital to ecosystemic health

Emerging Conflicts:

Small farm agriculture vs. corporate agriculture drinking water vs. agriculture
Sanitation (humans vs. microbes)
Regions ~ Nations vs. Other Regions ~Nations

Shortages will be experienced in <u>agriculture</u>, just when expanded food production is required.

Shortages will be experienced in <u>agriculture</u>, just when expanded food production is required.

Studies have appeared, warning of water scarcity around the globe (<u>BBC</u> <u>News</u>). Point to <u>conflict</u>.

Shortages will be experienced in <u>agriculture</u>, just when expanded food production is required.

Studies have appeared, warning of water scarcity around the globe (<u>BBC</u> <u>News</u>). Point to <u>conflict</u>.

In the last few months, UN has pointed to water scarcity and pollution problems in:

Shortages will be experienced in <u>agriculture</u>, just when expanded food production is required.

Studies have appeared, warning of water scarcity around the globe (<u>BBC</u> <u>News</u>). Point to <u>conflict</u>.

In the last few months, UN has pointed to water scarcity and pollution problems in:

<u>Africa</u>; in Asia - especially <u>India</u>; the Middle East and in <u>Brazil</u>. (BBC Report on India's 50 Million without water)

### Water Issues Are Already in News

Shortages will be experienced in <u>agriculture</u>, just when expanded food production is required.

Studies have appeared, warning of water scarcity around the globe (<u>BBC</u> <u>News</u>). Point to <u>conflict</u>.

In the last few months, UN has pointed to water scarcity and pollution problems in:

<u>Africa</u>; in Asia - especially <u>India</u>; the Middle East and in <u>Brazil</u>. (BBC Report on India's 50 Million without water)

Populations outrunning water supplies - ENN News 1 November 1999. And deserts are expanding.

### World Commissions Have Been Established

# World Water Forum March 2000 Meetings in the The Hague, Netherlands Overview of Problem (Conference Video).

### World Commissions Have Been Established

World Water Forum March 2000 Meetings in the The Hague, Netherlands Overview of Problem (Conference Video).

<u>CBC Report</u> on the Hague World Water Forum meetings. (Summary reports emphasize shortage).

### World Commissions Have Been Established

World Water Forum March 2000 Meetings in the The Hague, Netherlands Overview of Problem (Conference Video).

<u>CBC Report</u> on the Hague World Water Forum meetings. (Summary reports emphasize shortage).

BUT "Solutions in short supply at World Water Forum" - ENN, 28 March 2000. (<u>Extended BBC report</u> on the Hague Conference)

### The Hague Meetings and Aftermath...

Conflicting opinions emerge among delegates on the "pricing" of water as a result of <u>"The Hague Statement."</u>

### The Hague Meetings and Aftermath...

Conflicting opinions emerge among delegates on the "pricing" of water as a result of <u>"The Hague Statement."</u>

### Is Water as 'Human Right' or a Priced Commodity

One official position - <u>Head of World Water Commission</u>.

Evelyn Herskin's (Conference Chairwoman and South African position - waterscarce country). (<u>BBC Report</u>)

NGOs, including <u>The Council of Canadians</u> have opposed the "commoditization" of water at the Hague and <u>through NAFTA</u>. Maude Barlow has led the <u>struggle</u> and created a <u>"Blue Planet Project."</u>

### The Hague Meetings and Aftermath...

Conflicting opinions emerge among delegates on the "pricing" of water as a result of <u>"The Hague Statement."</u>

### Is Water as 'Human Right' or a Priced Commodity

One official position - <u>Head of World Water Commission</u>.

Evelyn Herskin's (Conference Chairwoman and South African position - waterscarce country). (<u>BBC Report</u>)

NGOs, including <u>The Council of Canadians</u> have opposed the "commoditization" of water at the Hague and <u>through NAFTA</u>. Maude Barlow has led the <u>struggle</u> and created a <u>"Blue Planet Project."</u>

One year after the Hague Conference (2000), The Council of Canadians organized a global <u>conference in Vancouver</u>, B.C. to alert the world to the "privitization crisis."

### How should we "frame" the world water crisis? [Here's where religiously held beliefs really matter ]

(Don't look now...but your worldview is showing...)

American engineers have a solution to these problems and it has to do with constructing new "infrastructure" – roads, bridges, dams, water delivery and sewage systems.

### How should we "frame" the world water crisis? [Here's where religiously held beliefs really matter ]

### (Don't look now...but your worldview is showing...)

- American engineers have a solution to these problems and it has to do with constructing new "infrastructure" roads, bridges, dams, water delivery and sewage systems.
- Consider <u>"How Water Won the West," *Bureau of Reclamation*, (1986).</u> The logic and habits of mind of the "empire builders" has dominated America's entire foreign policy toward the "Third World." (see, for example, the interviews with John Perkins - <u>"NOW"</u> and <u>Democracy</u> <u>Now</u> "confessions" in Week 5 Supplementary material)

# Throughout the world

What about the struggles over agriculture and water in other parts of the world....

- "The Battle over Blue Gold," *WBUR The Connection*, (27 August 2002) & Blue Covenant
- South America "Leasing the Rain" [articles]

India? – "Seeds of Suicide" – The <u>fate of Indian farmers</u> + Vandana Shiva World Water Crises – <u>"Water Refugees"</u> BBC's Directory to <u>"The Water Debate"</u>

### Local & 'Transboundary' Water Problems on the 'Blue Planet'

Posted on February 6, 2022 | Leave a comment | Edit

#### There is something wrong on this water wealthy planet...



"We had fed the heart on fantasies; The heart's grown brutal from the fare..." W. B. Yates, **Meditations in Time of Civil War** 

# March 2000 - Hague World Water Forum meetings



# MAUDE BARLOW Council of Canadians

# COUNCIL OF CANADI

# Maude Barlow COUNCIL OF CANADIANIS Vancouver - July 2001



# LORDS OF WATER

**Necessity or Commodity?** 

Copyrighted Material

### **Balancing Water** for Humans and Nature

The New Approach in Ecohydrology

Malin Falkenmark and Johan Rockström

### An Alternative is emerging....

There are alternatives being proposed for Africa. They have to do with re-inserting ecological process within the hydrological system. So far, however, they are not as yet *financed* and are not likely to be so in the near future because of our values and beliefs about capital intensive agriculture.

### Balancing Water for Humans and Nature

The New Approach in Ecohydrology

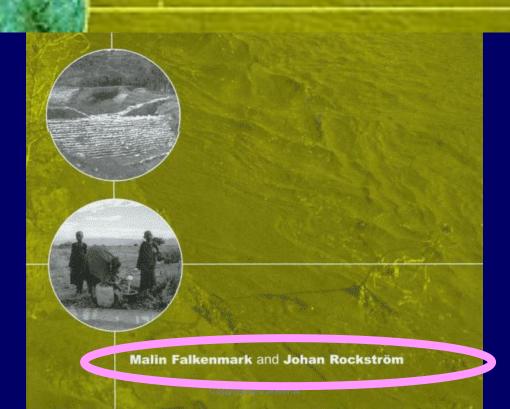
Malin Falkenmark and Johan Rockström

### An Alternative is emerging....

There are alternatives being proposed for Africa. They have to do with re-inserting ecological process within the hydrological system. So far, however, they are not as yet *financed* and are not likely to be so in the near future because of our values and beliefs about capital intensive agriculture.

# Balancing Water for Humans and Nature

The New Approach in Ecohydrology



# An Alternative is emerging....

There are alternatives being proposed for Africa. They have to do with re-inserting ecological process within the hydrological system. So far, however, they are not as yet *financed* and are not likely to be so in the near future because of our values and beliefs about capital intensive agriculture.

# Balancing Water for Humans and Nature





### An Alternative is emerging....

There are alternatives being proposed for Africa. They have to do with re-inserting ecological process within the hydrological system. So far, however, they are not as yet *financed* and are not likely to be so in the near future because of our values and beliefs about capital intensive agriculture.



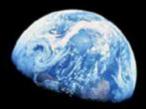


# We live on the only Blue Planet in the known universe.

Can we learn to survive sustainably *within* the rhythms of the biogeochemical cycling of its water – this symbol and substance of life?

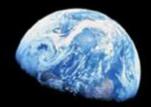


We live on the only Blue Planet in the known universe.



# In fact, we don't really have a choice...





We only have one Earth...



We only have one Earth...

We only get one chance.



We only have one Earth...

We only get one chance.



...on this -- the only blue planet in the known universe....



# Keep Your Eye on the Ball