



The **International Hydrological Programme** . . . and the **'World of Water'**

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Presentation Overview

Situate IHP Historically & Institutionally

- IHP as product of historical forces
- IHP's position vis-à-vis other global water initiatives
- Likely trends and IHP's future

Section I

Antecedents of the IHP

Roots of Water Consciousness and Its Internationalization

- **1880-1960s: Emergence of professional societies**
Water as science
Shared intellectual spaces
- **1945 . . . WW II ends: Multinational ways to avoid wars**
Improve human conditions → Reduce conflict
UN agencies
- **1950-60s: UN prompts 1st global resources initiatives**
Intl. Geophysical Year, 1957-58
Arid Zone Programme, from 1950
Intl. Hydrological Decade, 1965-74
Man & the Biosphere Programme, 1971-present
- **1945-late 1970s: Water ~ Development**
Dams, irrigation, drainage, hydro, transfers

Origins of the International Hydrological Decade

- **Postwar Polarization**

 - Isolation

 - Ideological differences

 - Gulf in science content

- **Responses: Call for global program**

 - Intl. Geophysical Year (IGY), 1957-1958

 - Intl. Hydrological Decade (IHD), 1965-74**

 - **Hydrological data**
 - **Research problems**
 - **Resource assessments & budget balances**
 - **Exchange information**
 - **Educate & train**

International Hydrological Programme (IHP)

- Last IHD action: 1974 Paris scientific conference
- *Question:* How to harness IHD energy, carry forward unfulfilled ambitions
- IHD ~ 1st part of long-term program
- 1974 UNESCO Gen. Conf. led transformation of IHD into periodically-renewable IHP

International Hydrological Programme (IHP)

- Goal similar to IHD: Link scientific research, applications & education on water
- 30 member states, 19 observers → 164 natl. committees
- Redefined every 6 yrs., admin. by UNESCO
- Phased approach → adaptation
- Since 1981 emphasizes practical, rational mgt. of water; since 1990 "sustainability" central
- Permanent forum for multinational coop. & innovation in water science & management



Section II

IHP in the Wider, Ever-changing
'World of Water'

Evolution of Organized Efforts

Four categories of Global Water Initiatives

- Professional Societies
- Designated Periods
- Organized Events
- Multilateral Organizations

Professional Societies

Intl. Navigation Assoc. (PIANC)	1885
Commission Internationale des Glaciers	1894
Intl. Union of Geodesy and Geophysics (IUGG)	1919
Intl. Assoc. of Hydrological Sciences (IAHS)	1922
Intl. Assoc. of Theoretical and Applied Limnology (SIL)	1922
Intl. Council for Science (ICSU)	1931
Intl. Assoc. for Hydraulic Research (IAHR)	1935
World Irrigation and Drainage Congresses	1951
Intl. Assoc. of Hydrogeologists (IAH)	1964
Intl. Water Resources Assoc. (IWRA)	1973
Intl. Water Assoc. (IWA)	1995
Intl. Water History Assoc. (IWHA)	2001

Designated Periods

<u>Period</u>	<u>Years</u>
Intl. Hydrological Decade (IHD)	1965-74
Intl. Drinking Water Supply & Sanit. Decade (DWSSD)	1981-90
Intl. Year of Freshwater (IYF)	2003
Intl. Water for Life Decade	2005-15

Organized Events

- **Types:** Forums, conferences, megaconferences
- **Topics:** All-inclusive themes vs. water only
- **Size:** 2003 World Water Forum ~ 10,000+
- **Who attends:** More interdisciplinary, more NGOs
- **Results:**
 - Well-intentioned declarations
 - Idealistic, largely unimplemented
 - Most common outcome: “networking”

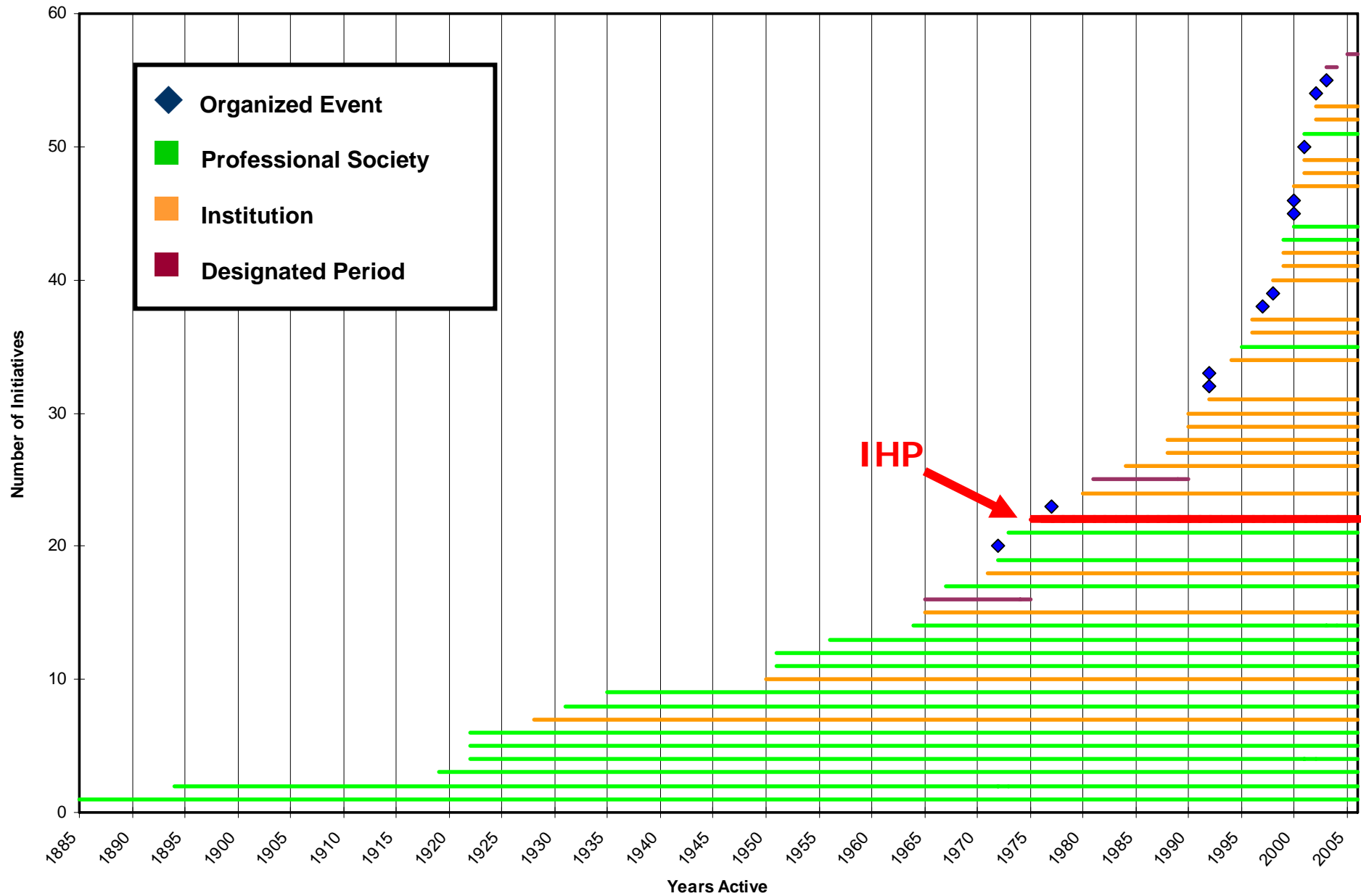
Events & Declarations

Organized Event — Declaration	Year	Venue
UN Conf. on Human Envir. — Stockholm Declar.	1972	Stockholm
UN Conf. on Water — MDP Action Plan	1977	Mar del Plata
Intl. Conf. on Water & Envir. — Dublin Statement	1992	Dublin
UN Conf. on Envir. & Devel. — Agenda 21	1992	Rio
First World Water Forum — Marrakech Declar.	1997	Marrakech
Intl. Conf. on Water & Sust. Devel. — Paris Declar.	1998	Paris
2nd World Water Forum — World Water Vision	2000	The Hague
UN Millennium Assembly — Millennium Declar.	2000	New York
Intl. Conference on Freshwater — Minist. Declar.	2001	Bonn
World Summit on Sust. Devel. — Jo'burg Plan of Impl.	2002	Jo'burg
Third World Water Forum — Kyoto Minist. Declar.	2003	Kyoto

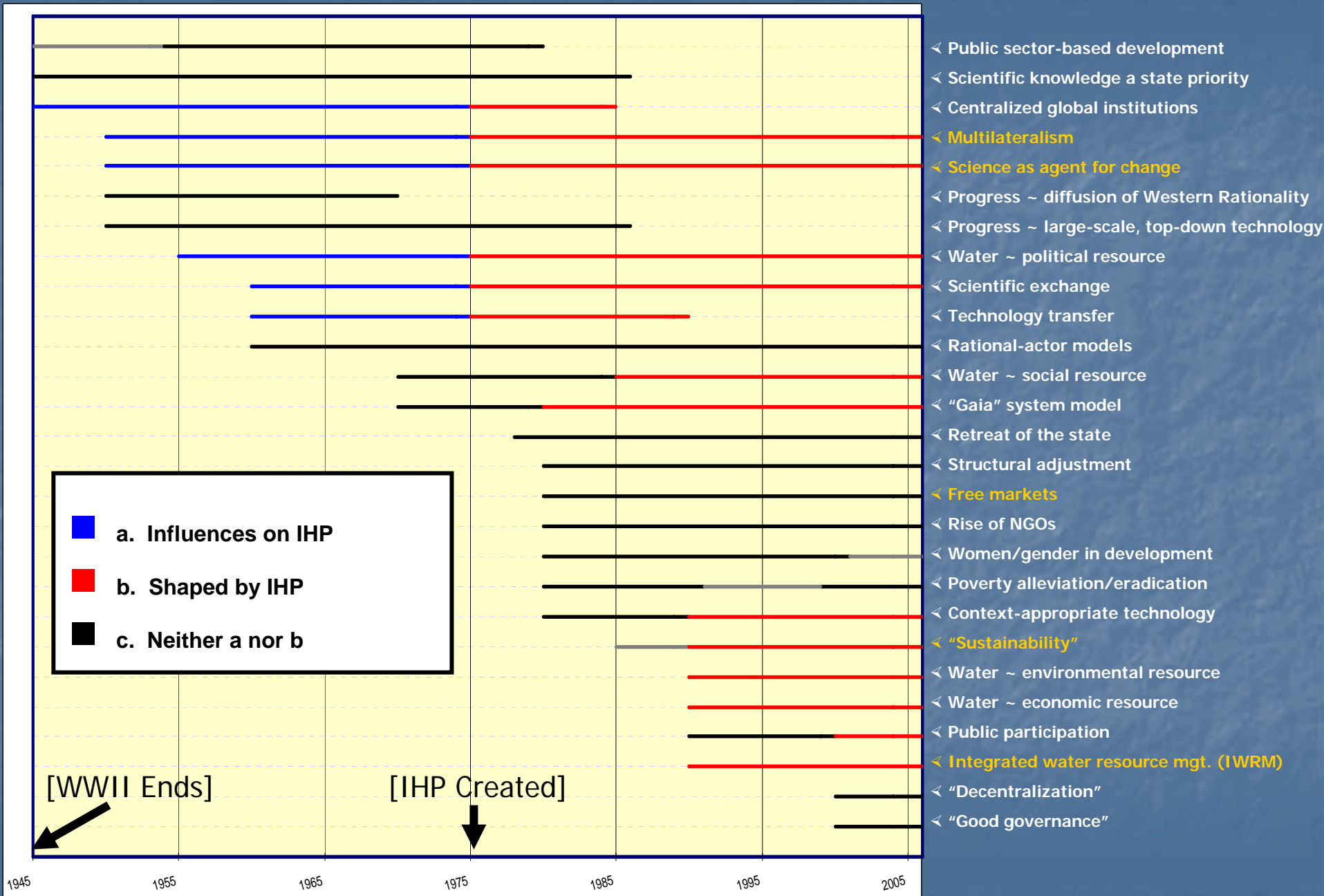
Multilateral Organizations

- **AIDA** (Intl. Association for Water Law)
- **AWRA** (Amer. Water Resources Assoc.)
- **CWS** (IGU Comm. on Water Sustain.)
- **DWC/CPWC** (Dialogue/Co-operative Prog. on Water & Climate)
- **DWFE** (Dialogue on Water, Food & Envir.)
- **GEWEX** (Global Energy & Water Cycle Exp.)
- **GIWA** (Global Intl. Waters Assess.)
- **GWP** (Global Water Partnership)
- **GWSP** (Global Water System Project)
- **HELP** (Hydrol. for Environ., Life & Policy)
- **IAH** (Intl. Assoc. of Hydrogeologists)
- **IAHR** (formerly Intl. Assoc. for Hydraulic Research)
- **IAHS** (Intl. Assoc. for Hydrol. Sci.)
- **ICID** (Intl. Comm. on Irrig. & Drain.)
- **ICOLD** (Intl. Comm. on Large Dams)
- **ICSU** (Intl. Council for Science)
- **IHDP** (Intl. Human Dimensions Prog. on Global Envir. Change)
- **IHP (Intl. Hydrological Programme)**
- **INPIM** (Intl. Netw. on Particip. Irrig. Mgt.)
- **IPCC** (Intergov. Panel on Climate Chg.)
- **IUCN** (World Conservation Union)
- **IUGG** (Intl. Union of Geodesy and Geophysics)
- **IWA** (Intl. Water Association)
- **IWALC** (Intl. Water Assoc. Liaison Committee)
- **IWMI** (Intl. Water Mgt. Institute)
- **IWRA** (Intl. Water Resources Assoc.)
- **MDGs** (Millennium Development Goals)
- **PCCP** (From Potential Conflict to Co-operation Potential)
- **PIANC** (Intl. Navigation Association)
- **Ramsar** (Ramsar Conv. on Wetlands)
- **UN Eco. Commission for Europe**
- **WCWTC** (World Comm. on Water for 21st C)
- **WHO** (World Health Org.)
- **WMO** (World Meteorological Org.)
- **WWAP** (World Water Assessment Prog.)
- **WWC** (World Water Council)
- **WSSCC** (Water Supply & Sanit. Collab. Council)

The IHP in the Context of the Wider Field of GWIs

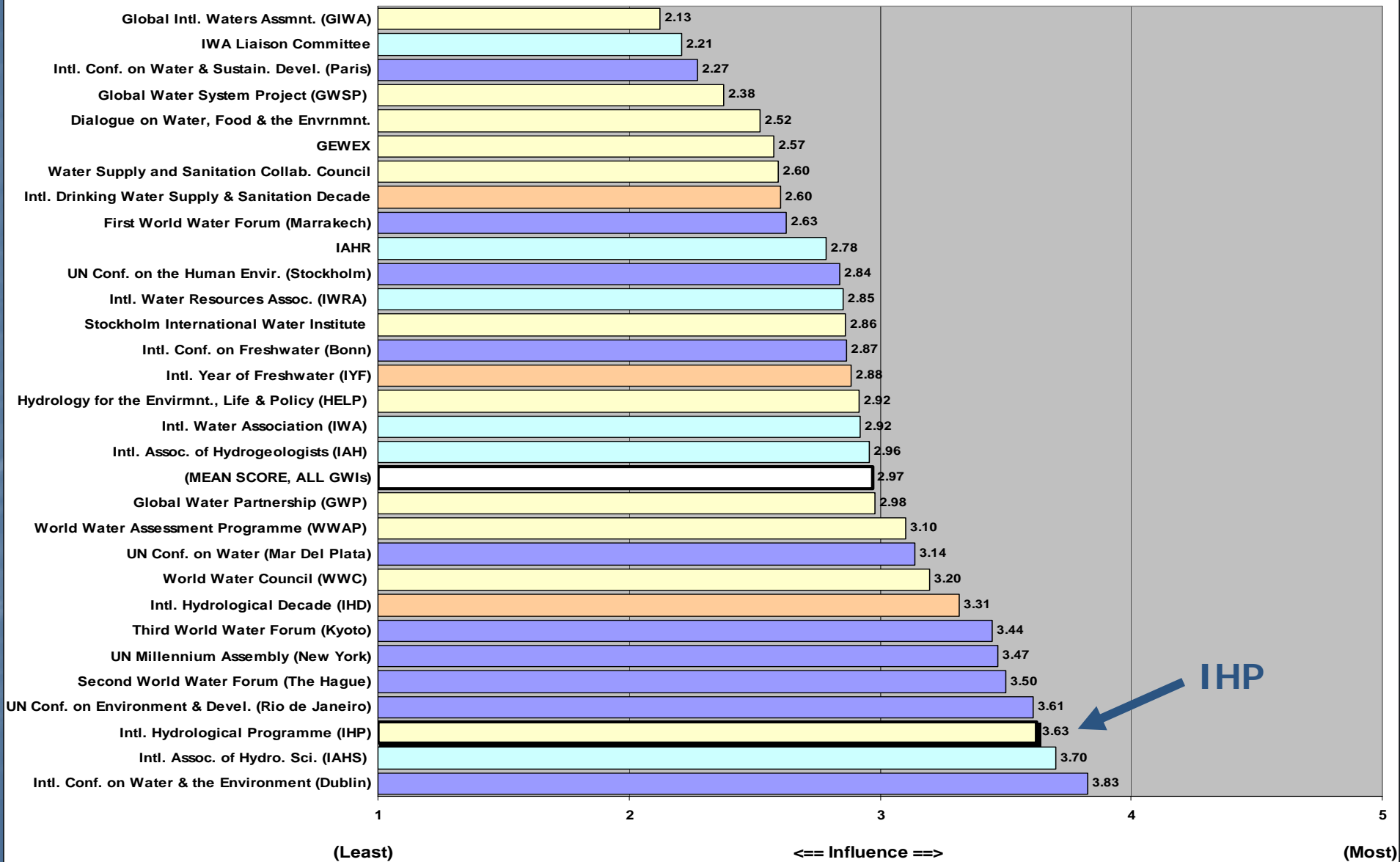


Evolution of Dominant Conceptual Paradigms in the 'World of Water'



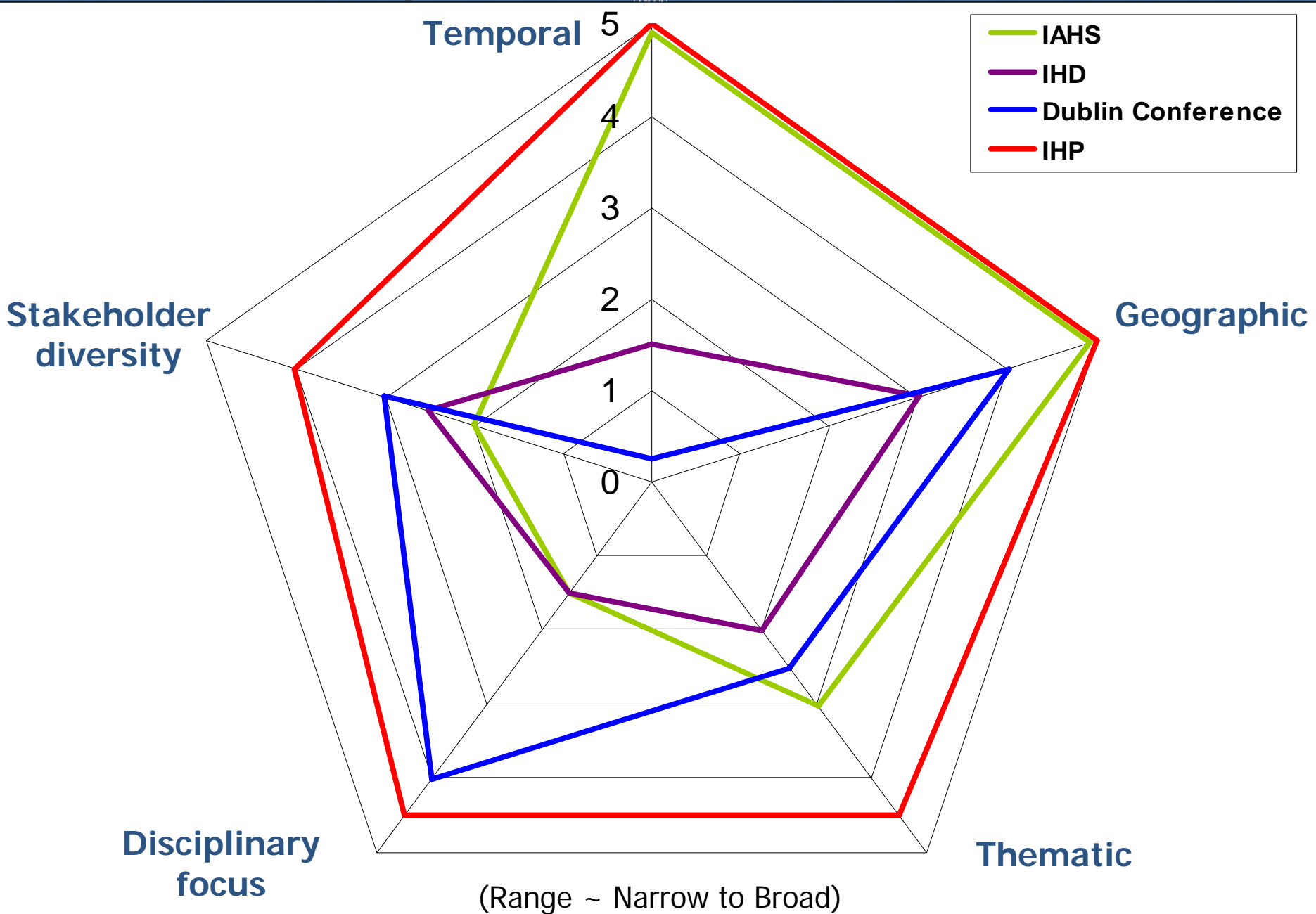
(Source: Ellis and Biggs, 2001; Varady, 2003)

Assessing IHP's Relative Influence

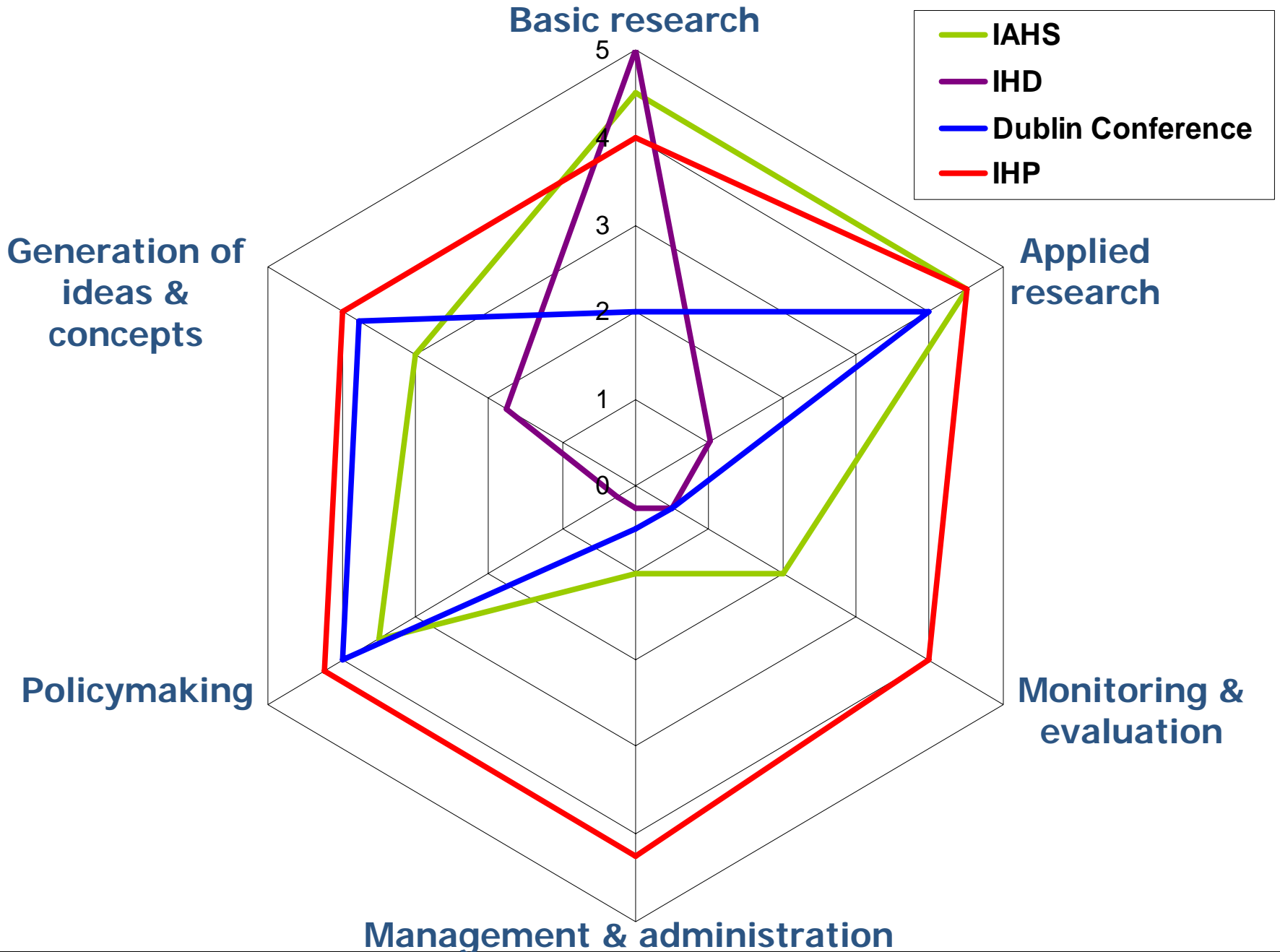


(Varady and Iles-Shih, 2005)

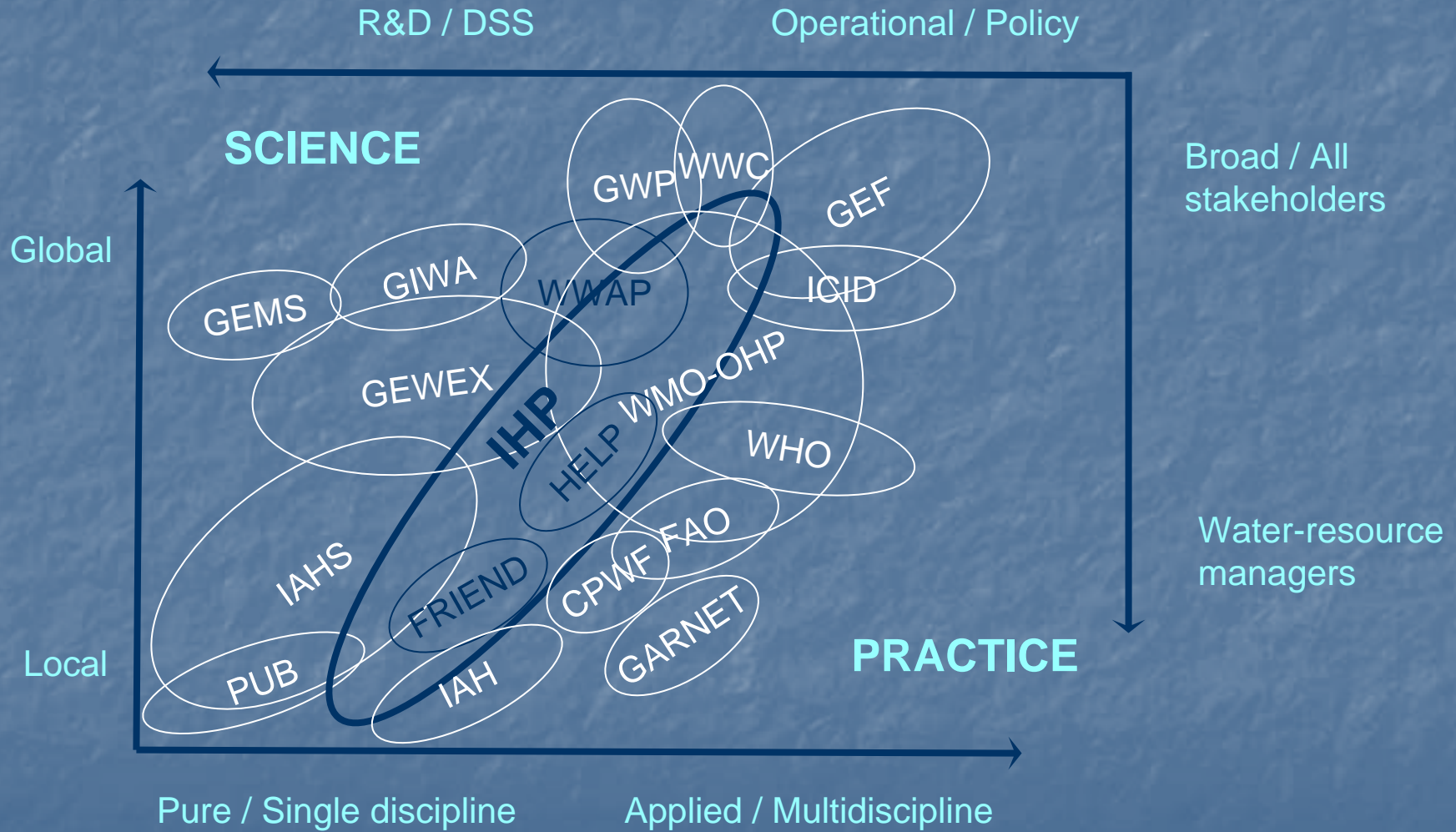
Scope of Influential Initiatives



Programmatic Orientation of Influential Initiatives



Institutional Landscape



(Adapted from Wallace, 2004)

Section III

What Lies Ahead?

Likely Trends

- More proliferation
- Continuing overlap
- Scarce financial resources
- Inevitable attrition
- Need for better integration of science & policy
- Perception of impending water crisis likely to drive strong continuing interest
- New paradigms will emerge

Conclusions

The Future of IHP?

- **Robust, self-regenerating institution**
- **Will maintain broadest scope, most extensive programmatic orientation**
- **Remain as anchor for other initiatives**
- **Likely to continue to adapt and remain central and influential**