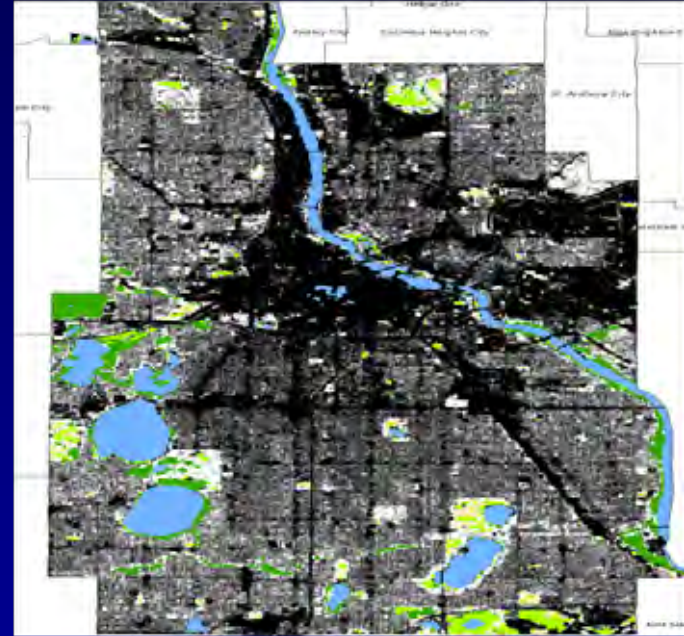
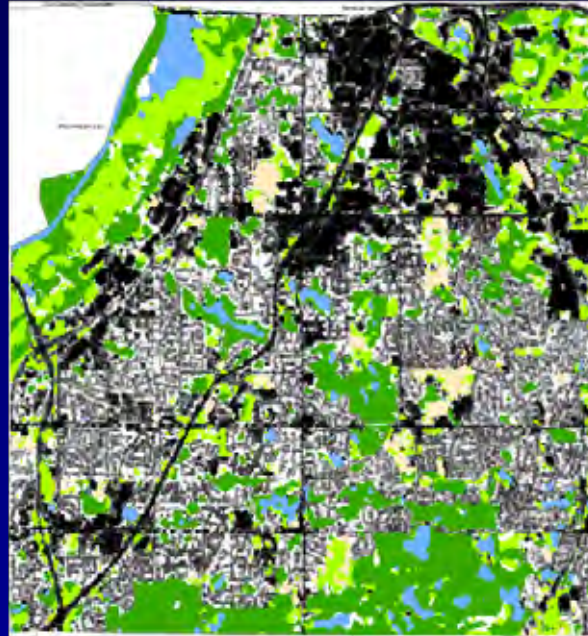


Community Development Stages

Growing Communities →

Established Communities →

Ultra-Urban Communities .

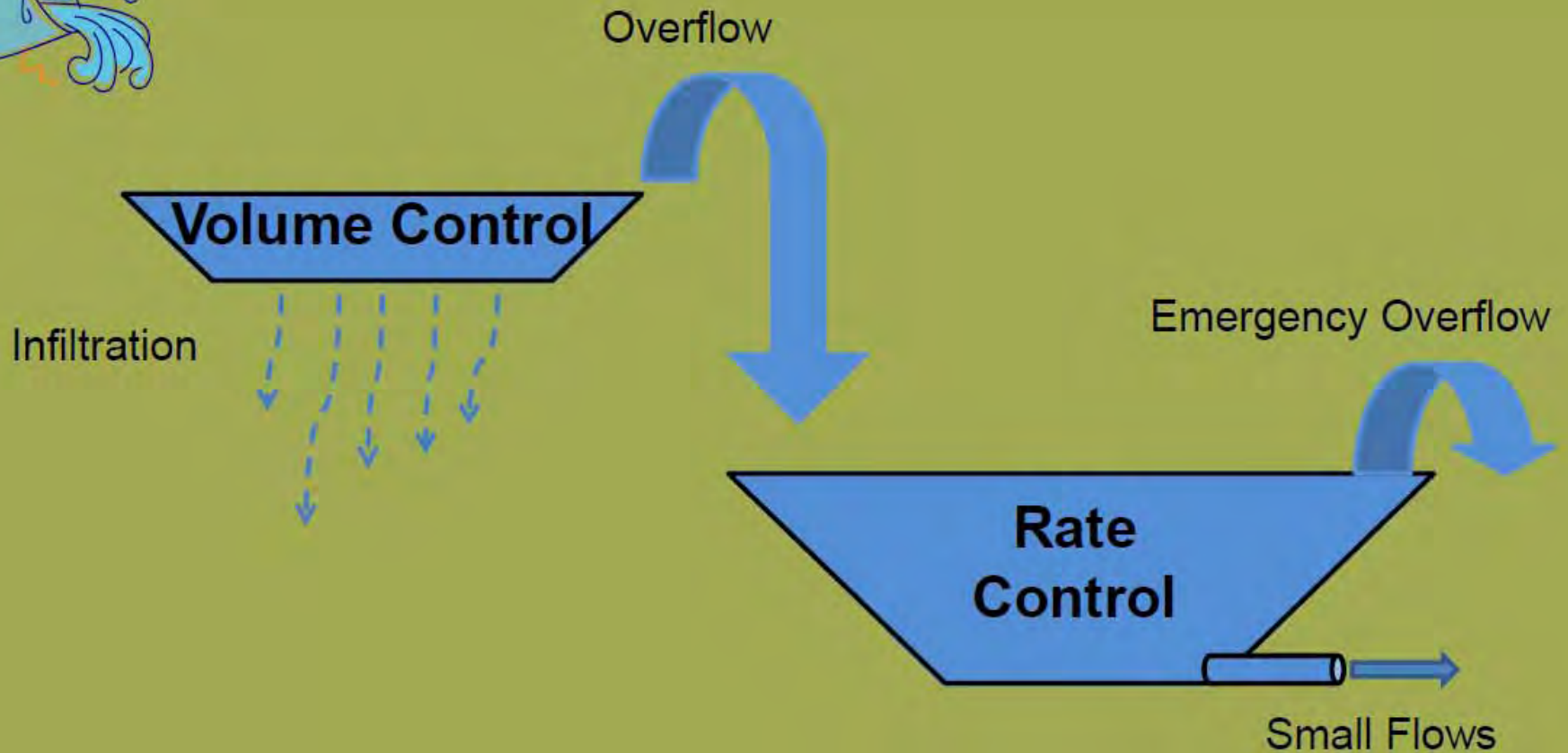


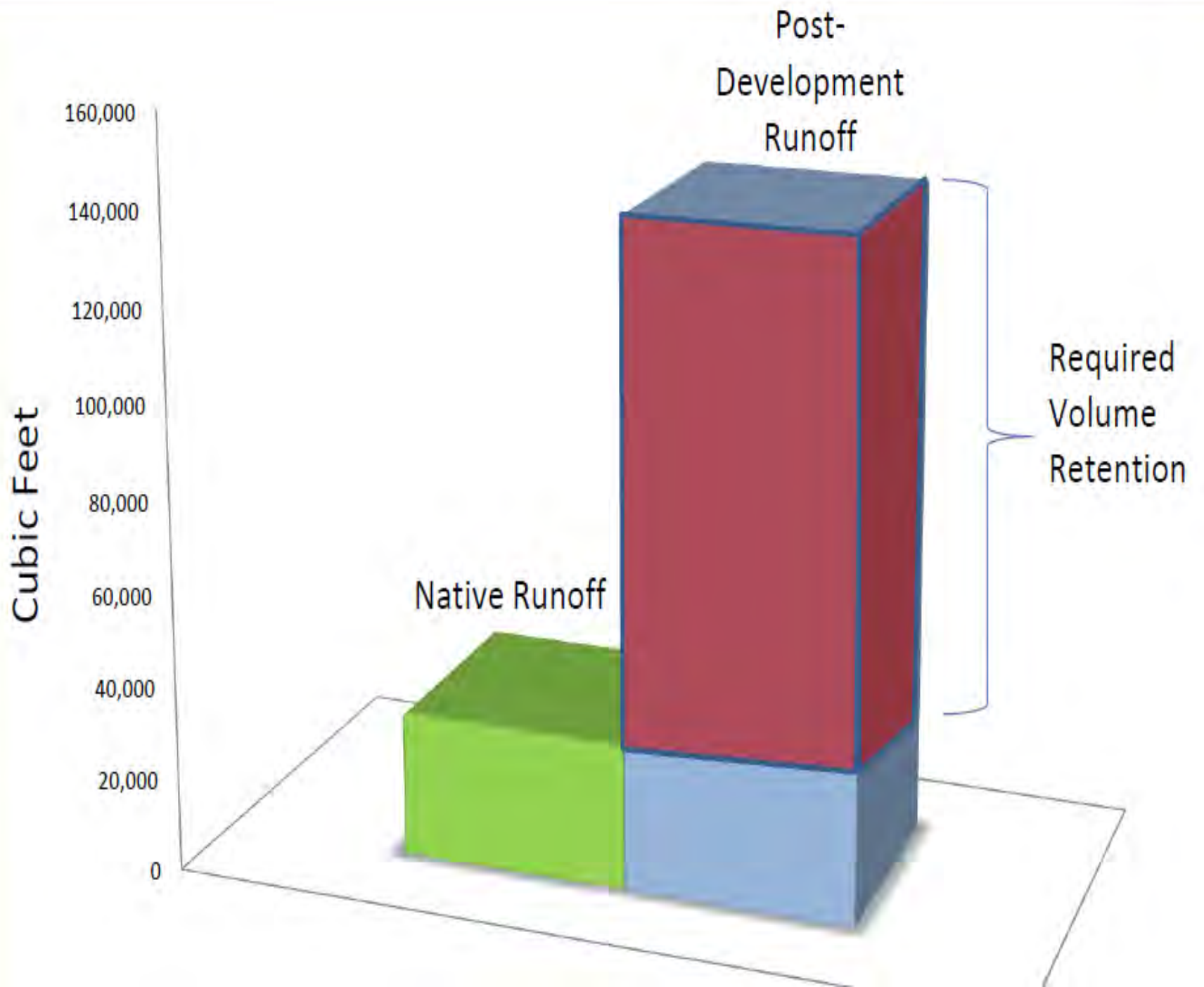
Ham Lake, MN (~19 % urban) →

Eagan, MN (64% urban) →

Minneapolis, MN (88% urban)

Volume and Rate Control BMPs in Series







Minnesota Region	Natural Vegetation	Developed Site Imperviousness	X needed for "X times the impervious area" to not exceed the Natural Average Annual Runoff Volume (inches)			Retainage from Percentile Storm needed to not exceed the Natural Average Annual Runoff Volume (Precipitation Amount, inches)		
			Hydrologic Soil Group			Hydrologic Soil Group		
			A	B	C	A	B	C
Average of Locations	Average of Meadow and Woods	Average of 20% and 80%	1.1	1.1	1.1	93%	93%	92%

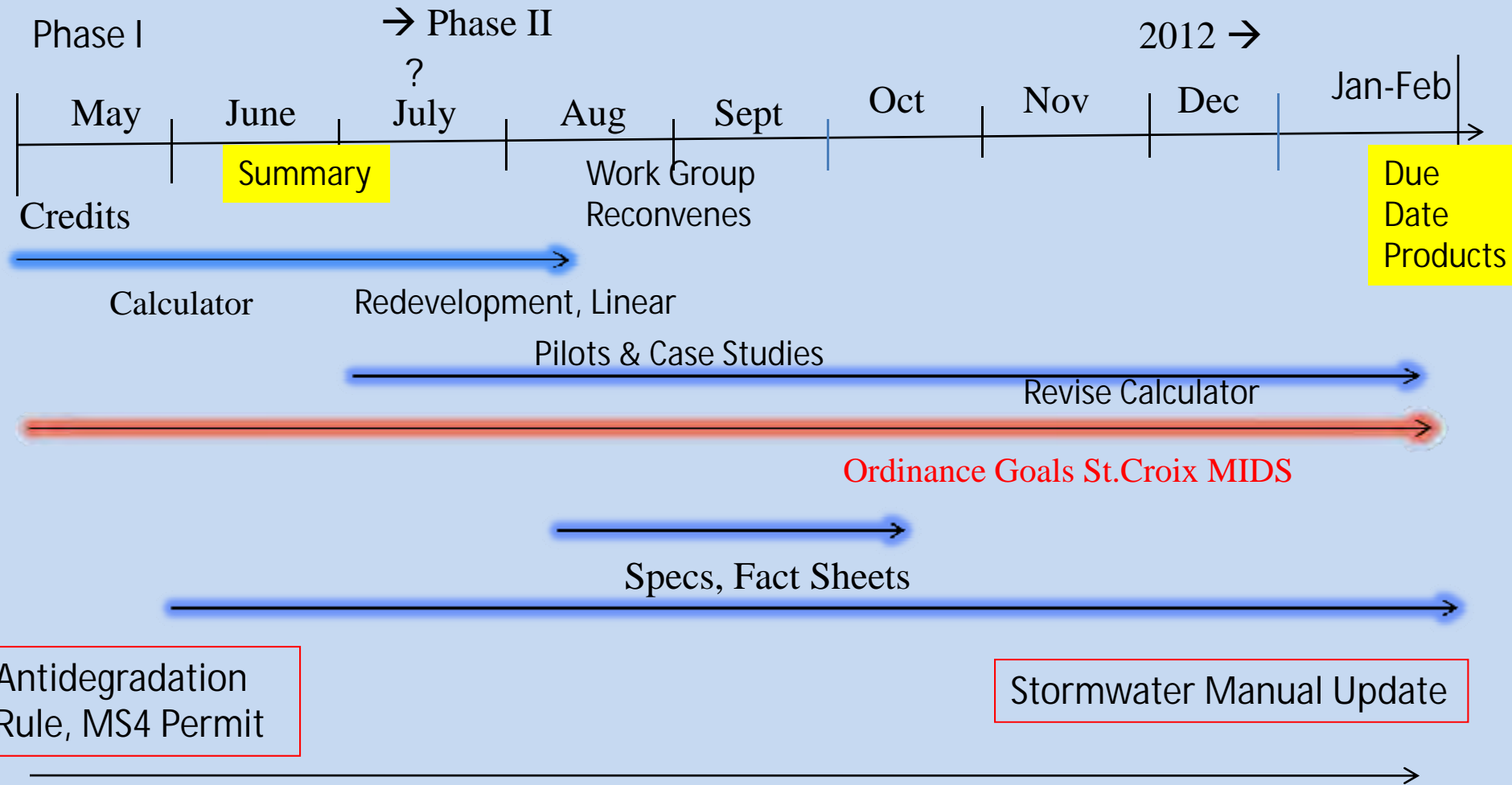
MIDS Timeline

- **Feb, 2010** Work Group initiated
- **Spring, 2010** - Budget cuts
- **Summer 2010** - Completed RFP, contracts signed, work began.
- **June, 2011** Phase I completed.
- **July, 2011 - Feb, 2012** – Phase II
 - Tom Schueler – redevelopment & support
 - MIDS Consultant contracts
 - Work orders in place mid-June ? July startup
 - Integrated with Stormwater Manual updates

Phase II

- Updated NOAA precipitation intensity
- Alternatives
 - Filtration, mitigation
- Redevelopment & Linear
- Credits
- Pilots – case studies
- Revised Calculator

MIDS Adjusted Timeline



New Development

- **New Development (Wisconsin NR 151)**
- “New development” means development resulting from the conversion of previously undeveloped land or agricultural land uses.
- “Development” means residential, commercial, industrial or institutional land uses and associated roads.
- **“Redevelopment”** means areas where development is replacing older development.
- Redevelopment is: Any construction, alteration, or improvement that disturbs land where the existing land use is commercial, industrial, institutional, governmental, or multifamily residential. This also includes sites with these prior land uses that have been abandoned or razed.