Tactical Basin Planning: Governance Networks in the Winooski River Sub-Basin

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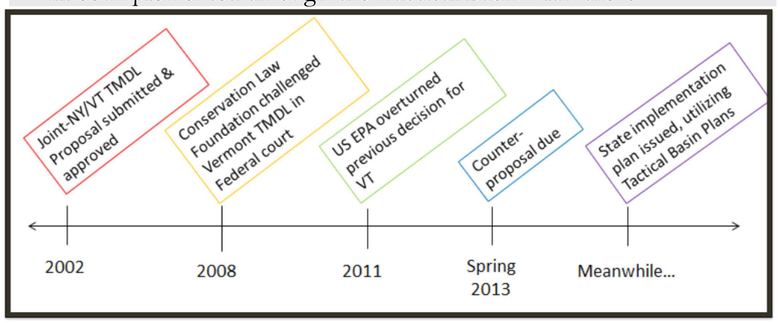
Introduction

In the summer of 2015, the US EPA will provide its counter-proposal for the State of Vermont's Lake Champlain TMDL after rejecting the proposal given by the state in 2009. One of the key pieces in effectively implementing the coming regulation is the Tactical Basin Plan, a long-established system whose purpose is to outline how to clean up Vermont's waterways.

The Winooski River is the largest tributary to Lake Champlain, stretching from Cabot in the Northeast Kingdom to its outlet in Colchester for a total drainage area of 1,080 square miles, or 11.9% of Vermont. It runs through Chittenden County, the most populated in the state, and as a result, it is an area of particular importance in the clean-up of the lake.

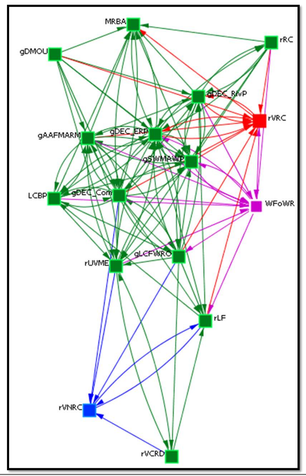
This study examines the governance networks within the Tactical Basin Plan action arena for the Winooski River sub-basin, paying particular attention to the financial significance of watershed organizations, examining their role in the governance networks of the Winooski River in order to better understand how the TMDL will be implemented through the Tactical Basin Plan there.



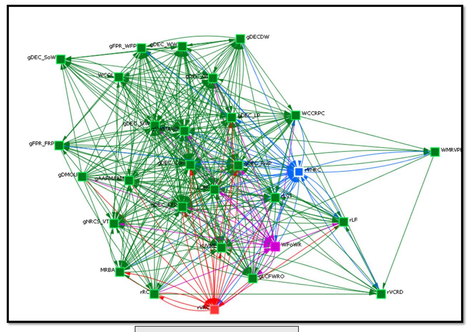
Methods

1. Using *ORA's visualizing component, create network maps of each network, (Coordination, Financial Resource Sharing, Information Sharing, Technical Assistance, Report To, Principal-Agent) color-coding each watershed organization to match within each subnetwork.
2. Create Standard Network Analysis reports for entire Tactical Basin Planning action arena, as well as individual networks that show top 10 nodes using *ORA .
3. Using UCINET, I created simple core-periphery reports for each network in order to examine placement within structure of network .
4. Calculate what percentage of financial resource sharing network is grants by using tie count for FRS/grant intersection network and dividing it by tie count in union network .
5. Locate the 3 watershed organizations of interest, count number of inbound and outbound connections of each & to which orgs.

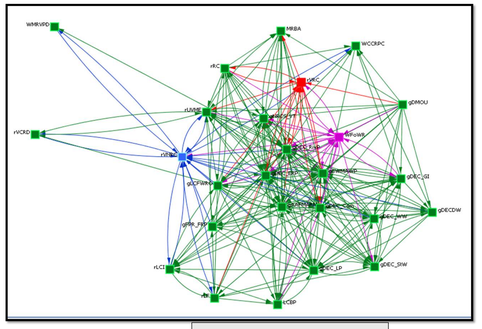
Results



Financial Resource Sharing

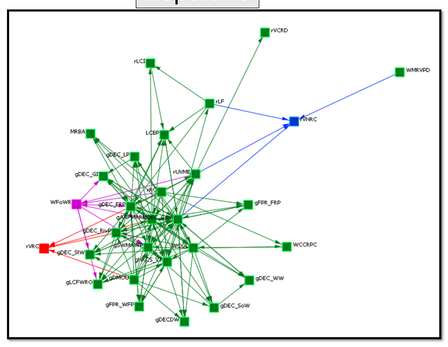


Info Sharing

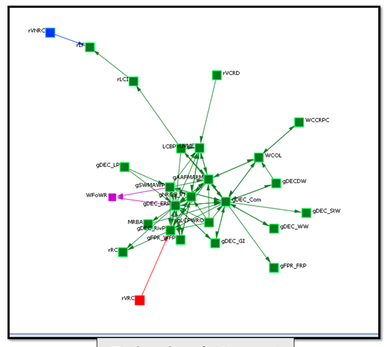


Coordination

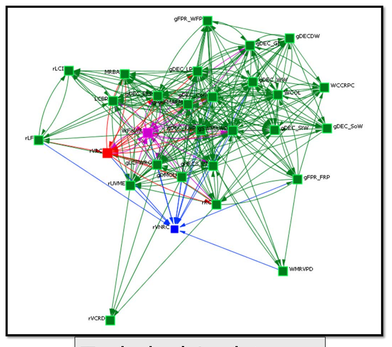
Report To



Red – Vermont River Conservancy
Blue – VT Natural Resources Council
Violet – Friends of the Winooski River



Principal-Agent



Technical Assistance

Conclusions

VT Natural Resources Council (VNRC):	Friends of the Winooski (FOWR):	VT River Conservancy (VRC):
- Between 5 & 10 full-time - <10 part-time - Between $500k and $1 m.	- <5 full-time - <10 part-time - <$50,000	- <5 full-time - <10 part-time - Between $500k and $1 m.

Overall:
- Top network nodes are primarily government agencies
- 16/29 overall orgs reported to be part of Financial Resource Sharing network

VNRC:	Friends of the Winooski:	VRC:
- Core of Information-Sharing - Lowest % of ties to top-5s.	- Highest # overall ties, top-5s - Core of TA, Coordination	- 14/69 completed projects were on Winooski River or its tributaries

- Friends of the Winooski River will prove to be a vital resource for Tactical Basin planning leaders despite their small size & because of their extensive connections within Information Sharing, Coordination, and Technical Assistance.
- VRC should not receive priority attention from TBP leaders unless they become more involved in work connected to Lake Champlain's tributaries
- VNRC will play a lesser role than FOWR, but will still prove to be an important link between less-connected organizations.

Works Cited

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Acknowledgements

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