



Fisheries GIT

Update on EBFM governance network study by VASG and MDSG

Overview of network analysis

Examples

Status of the EBFM study

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Overview

Network Analysis – Nodes and Links

- Social Network Analysis
- Communication Network Analysis
- Graph Theory algorithms—spatially arranges nodes.
- Software—graphically maps nodes and links
- Quantitative measures of map's structure and function
 - Density—group cohesion, trust, consistent behavior
 - Path length—disparate sub-groups, far apart
 - Centrality measures—bridgers, info disseminators, “the pulse”

Growing application in public policy and management

Overview

Governance Networks

- Example of adaptive behavior—on-the-ground implementation reality
- Non-hierarchical, emergent
- Varying degrees of formality

Early research on contractor

Recent research on multi-sector, multi-stakeholder, multi-jurisdictional cases

Examples

What can we do with communication network analysis

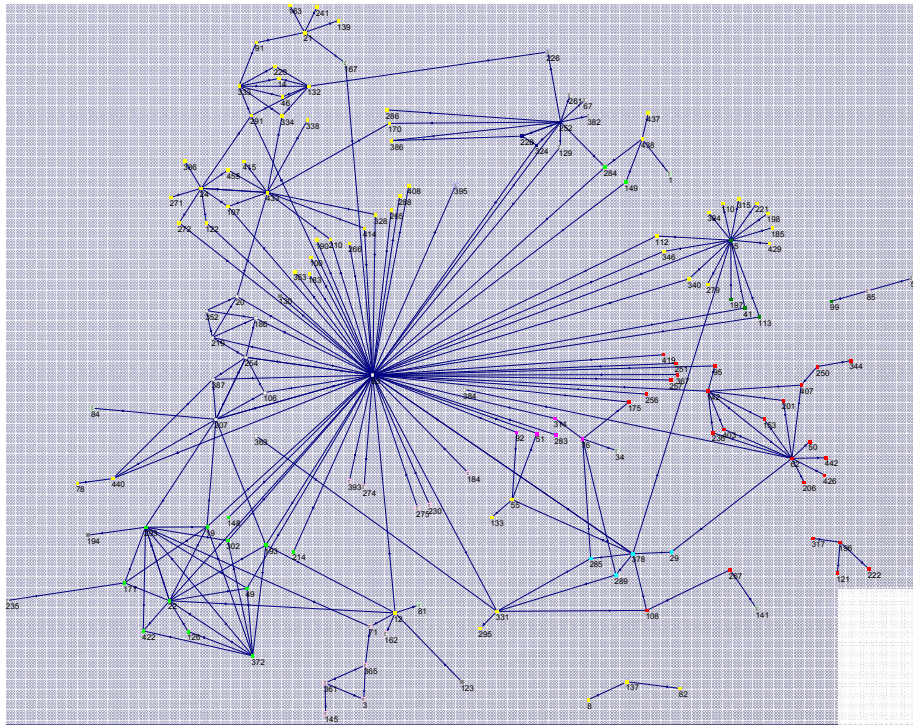
- Atlantic Herring FMP
 - Science-to-management
 - Stakeholder engagement patterns
 - Network resiliency
- NH Commercial Fishing Industry
 - Targeted outreach
- Watershed management—Fisheries management
 - Integrated management potential
- EBFM governance network
 - Local-state-federal links
 - Network performance

N=146

1% density

2.51 wght avg path length

Resiliency



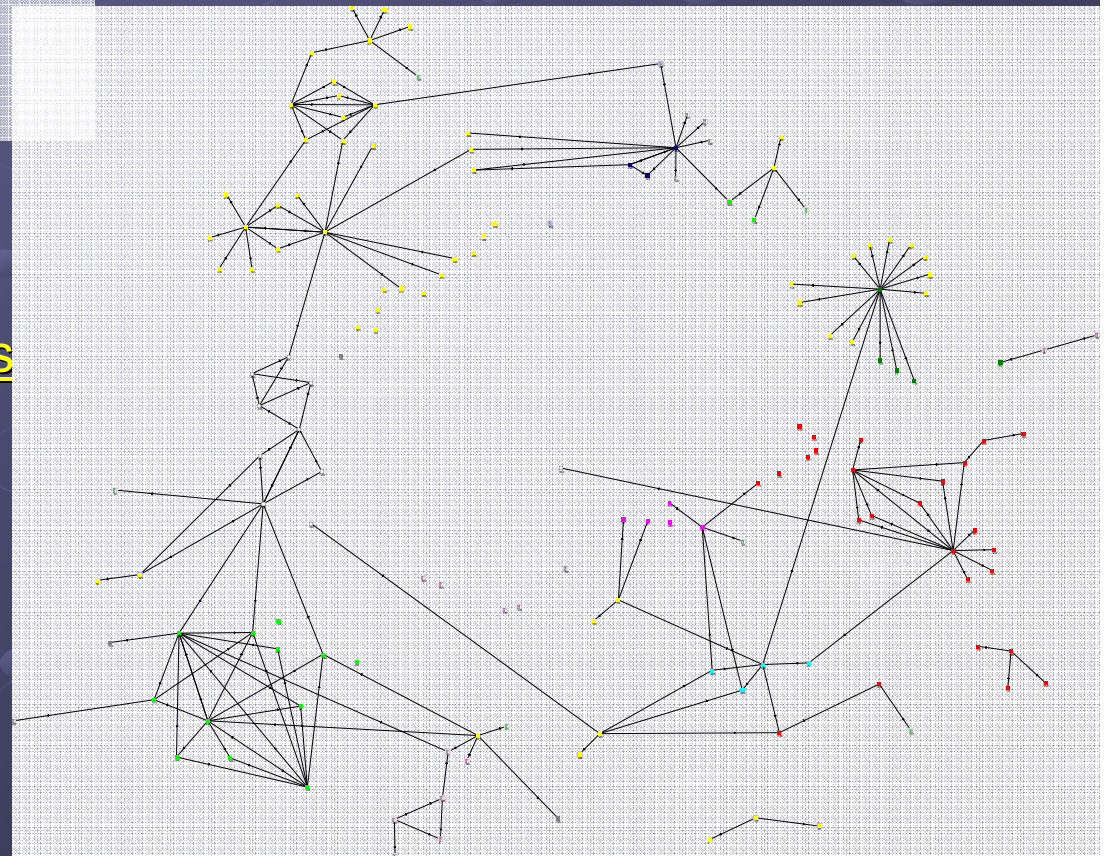
5 Groups from 1 of N=146

Weekly – remove hi betweenness
N=74

2.04 wght avg path length

N=48

1.21 wght avg path length

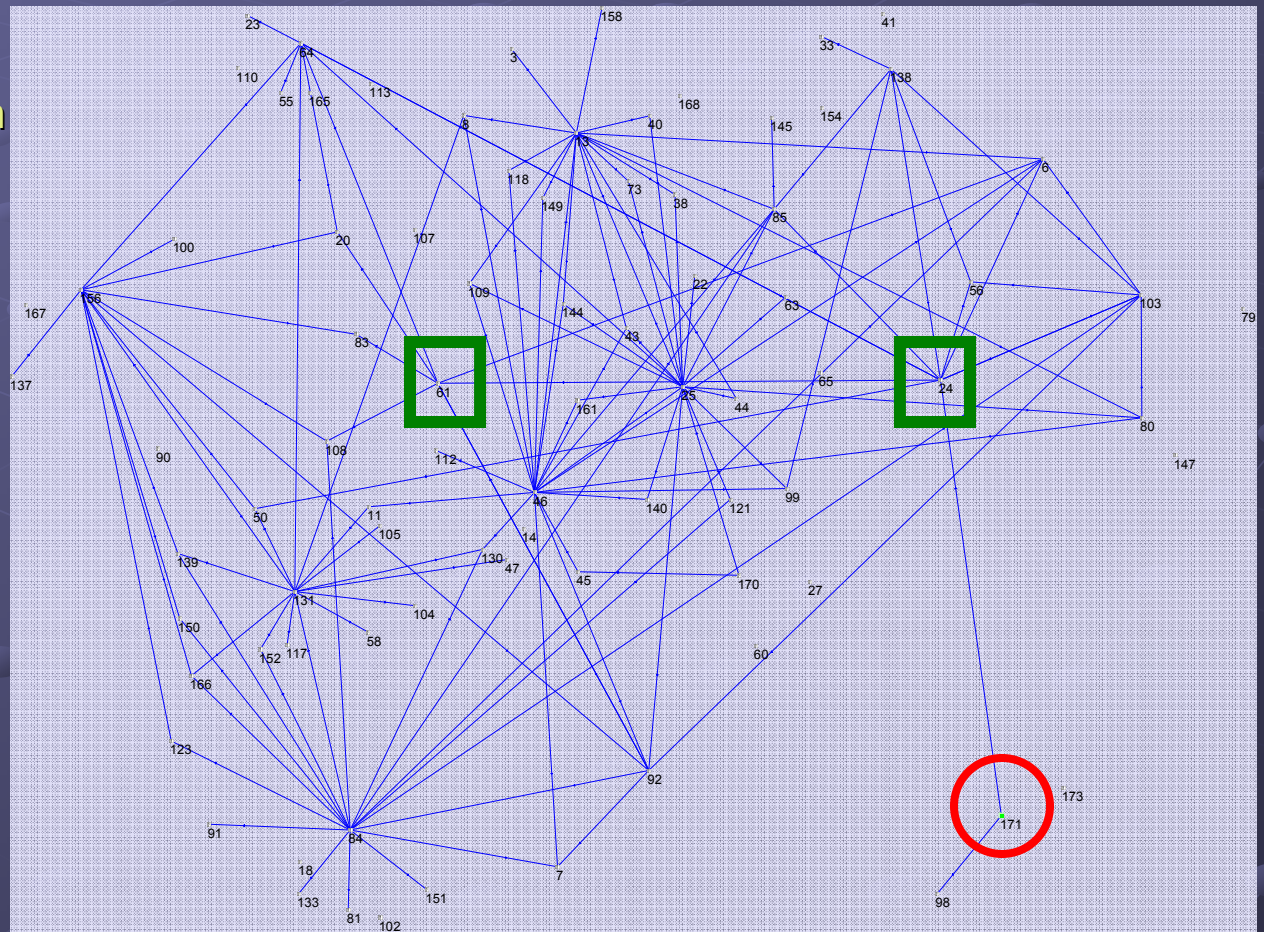


Example:

NH Commercial Fishing Industry

Weekly communication

66 members
3% density
2.02 average path length



EBFM Gov Net Study

Socioeconomic QET—Governance Network Study

- Regulatory landscape—baseline
 - Multi-jurisdictional
 - Local-state-regional-federal parties
- National Sea Grant Law Center
- Research Team
 - Political scientist, Law professor, policy interns
- Network performance measures
 - EBFM participants
 - Two “cases”—critical places in the Bay

EBFM Gov Net Study

EBFM Governance Network Study—achieved

- Two summer interns
 - Jessica Eckerlin
 - Jennifer Reichle
- Preliminary study of the EBFM participants
 - Data analysis
- Prioritized two geographic cases
 - Accomack County VA—Somerset County MD
 - Cecil and Kent Counties MD—New Castle County DE
- Compiling sample and site visit
 - Refining questionnaire and administration protocols
 - Key informant interviews

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EBFM Gov Net Study

EBFM Governance Network Study—forthcoming

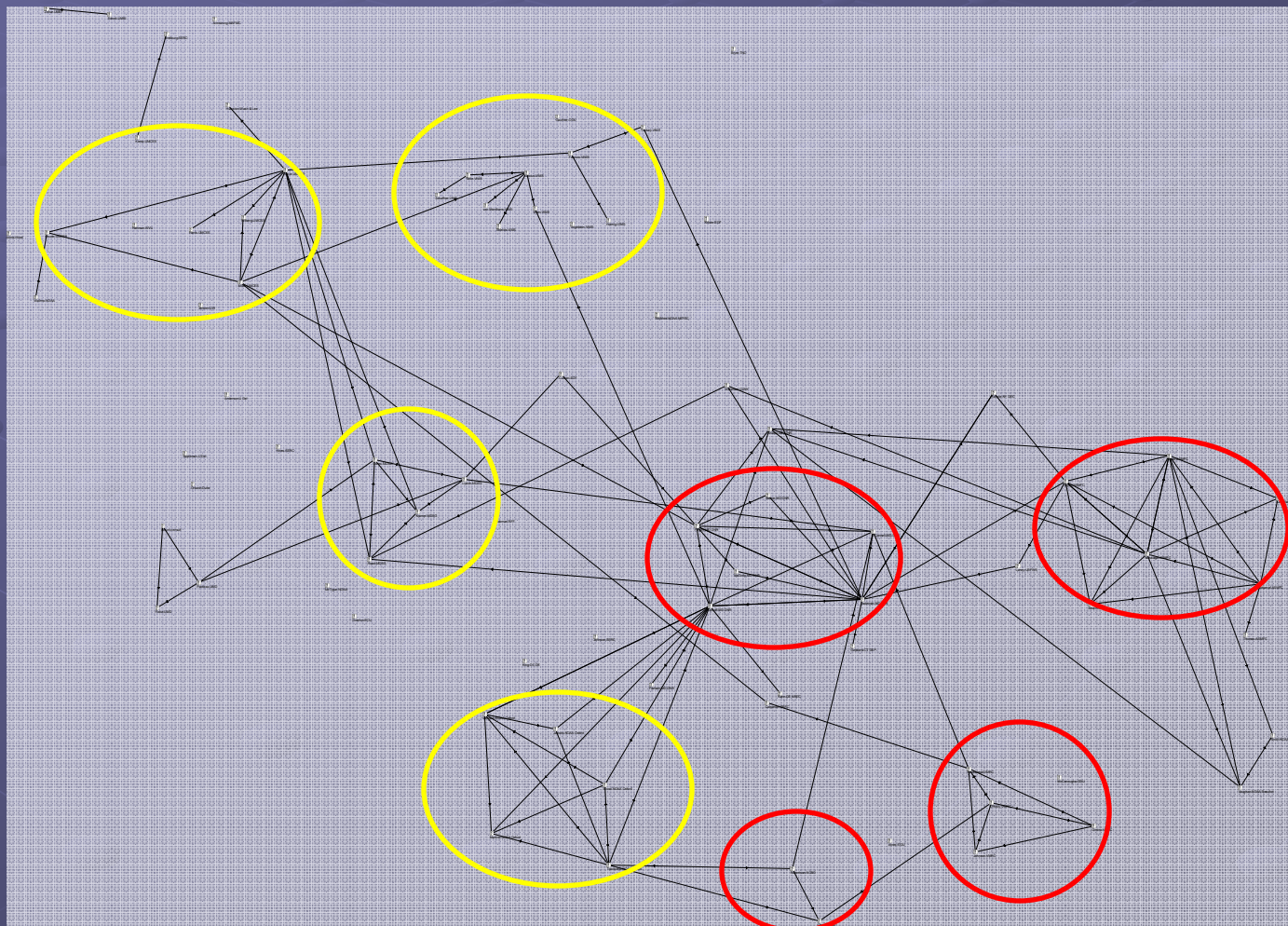
- Interns
 - Jessica Eckerlin
- Research Team review of instrument
 - Network measures
 - Performance measures
- Survey the five counties
 - Data collection and analysis
- End: January 31, 2011

EBFM Gov Net Study

EBFM Governance Network Study

Weekly:
58N

4% Density
3.13 Wght Avg Pathlength



THANK YOU!

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