Spatial variation of habitat in Hinkson Creek:

The framework for diagnosis and recovery

0	0.25	0.5				1 Miles
	1 1	1 1	- 1	1	1	

Habitat Assessments, Hinkson Creek

- Nested scales:
  - GIS/remote sensing scale (MoRAP, MU)
    - Spatial variation in system potential
    - Spatial variation in possible stressors
    - Spatial variation in evidence of impairment
      - Infer dominant source(s)
  - Field scale (MU)
    - Spatial variation and indicators of impairment
      - Add detail, validate GIS/RS scale
      - Additional insights into cause/effect of impairment – especially role of physical habitat

Habitat Assessments, Hinkson Creek

- Questions addressed:
  - What are fundamental controls on Hinkson Creek habitat, biophysical capacity?
    - Network structure where, what types of tributaries affect flow, water quality?
    - Hard constraints where is the channel constrained by (practically) unalterable factors like bedrock, infrastructure?
  - What are the potential sources of stress on Hinkson Creek?
    - Where do land uses in tributary watersheds, point sources, infrastructure affect the creek? What is their relative magnitude?

Habitat Assessments, Hinkson Creek

- Questions addressed:
  - What alterations in aquatic habitat can be identified, at what level of severity, and can their locations be used to infer cause of the impairment?
    - Channel dimensions, sedimentation, canopy closure...
  - Where along the stream corridor are there opportunities for mitigation/mediation of stressors?
    - Geomorphic settings that can be used for restoration activities similar to the level spreader at Forum.