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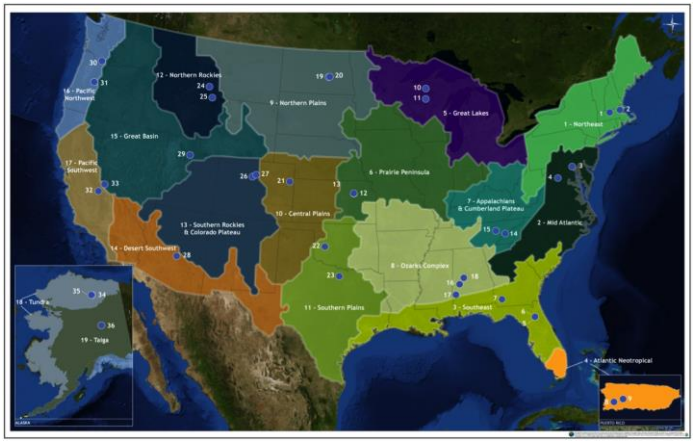
Linking into the National Ecological Observatory Network (NEON)

Three papers in this BRIDGES cluster discuss future directions and opportunities in Freshwater Science, and explore how the National Ecologial Observatory Network may aid in the advancement of freshwater science research. Key points include:

- Current and future andvances in aquatic sciences are geared towards questions covering multiple scales and levels of complexity to detect and predict watershed responses to environmental change (Goodman et al. 2015, McDowell 2015, Sobczak and Raymond 2015)
- Historically, aquatic sciences have been limited by a lack of data discoverability, sharing, and standardization (Goodman et al. 2015)
- The National Ecological Observatory Network (NEON) is the first continental-scale ecological observation system that will collect and provide freely available, standardized data designed to investigate the drivers and responses of ecological change (Goodman et al. 2015).
- Both opportunites (Goodman et al. 2015, McDowell 2015, Sobczak and Raymond 2015) and challenges (McDowell 2015) will follow accesss to such spatially and temporally extensive datasets.
- Examples of expanding scale to better understand ecological drivers and responses include using long-term, high-frequency fluorometry and discharge data sets for temporal scaling of DOM export across watersheds (Sobczak and Raymond 2015), expanding stream theory into large river ecology (Goodman et al. 2015), and advances in aquatic ecosystem function at multiple spatiotemporal scales (McDowell 2015).



Map of 20 NEON domains and 36 Aquatic candidate core and relocatable locations (Figure 1 from Goodman et al. 2015).

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