PPF: Artificial Intelligence Driven Workflows for Assisting in Synthesizing Climate Change Assessment for Water Adaptation Progress

- Christine Kirchhoff, College of Engineering
- Sarah Rajtmajer, College of Information Sciences and Technology

Abstract: This proposal seeks to develop the Water Adaptation Synthesis Portal (WASP), an AI-driven system to enhance adaptation tracking in California's water sector. Leveraging small, open language models like Llama and techniques such as few-shot learning, WASP will streamline adaptation tracking by automating evidence extraction with a human-in-the-loop approach. This system aims to address the growing need for timely and scalable adaptation tracking, reducing researcher time while delivering real-time insights into climate adaptation progress. The final output is a fine-tuned model for supporting sub-national adaptation tracking in the water sector as well as a protocol for the use of AI in evidence synthesis.