

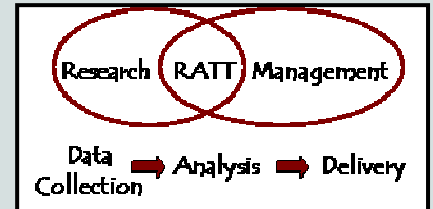


Air, Water and Aquatic Environments Science Program

Rocky Mountain Research Station



Research Analysis and Technology Transfer Team (RATT)



Research

Technology Transfer

Science Application

Key Products and Services:

- GIS and remote sensing analysis
- Database design and management
- Web development and programming
- GIS programming
- SAS programming
- Database summaries
- Maps for publications
- Print media production
- Project scoping and cost estimates
- Tool development and training
- Data production for NFS and other clients
- Third party tool testing and synthesis
- Data packaging, distribution and archive Technology Transfer

Challenge

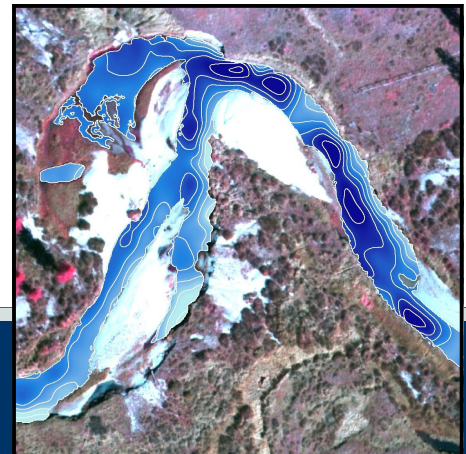
The successful research team of today must possess multiple skills in order *to complete the entire research cycle*, from data collection through product delivery. A group of skilled professionals and technicians is necessary to complete technology tasks that are simply not feasible for researchers to achieve alone.

Context

We are in an era where research must be conducted at multiple scales and at regional extents. Technology disciplines such as geographic information systems (GIS), remote sensing analysis, and database management play an important role in meeting these challenges. Science products must be delivered to land managers through web content, software tools, data delivery, and print production. Finally, data must be properly documented and archived. A multi-skilled science team is needed to accomplish all of these tasks, which are necessary to support priority research.

Actions

- We have formed a group of professionals called the **Research Analysis and Technology Transfer Team** who will assist scientists in gathering data, performing analyses, and delivering science products.
- Researchers will be supported through data collection and processing.
- Data will be packaged, delivered and archived.
- The RMRS science message will be delivered through publications and web content.
- NFS projects such as PACFISH/INFISH will become cornerstone activities.



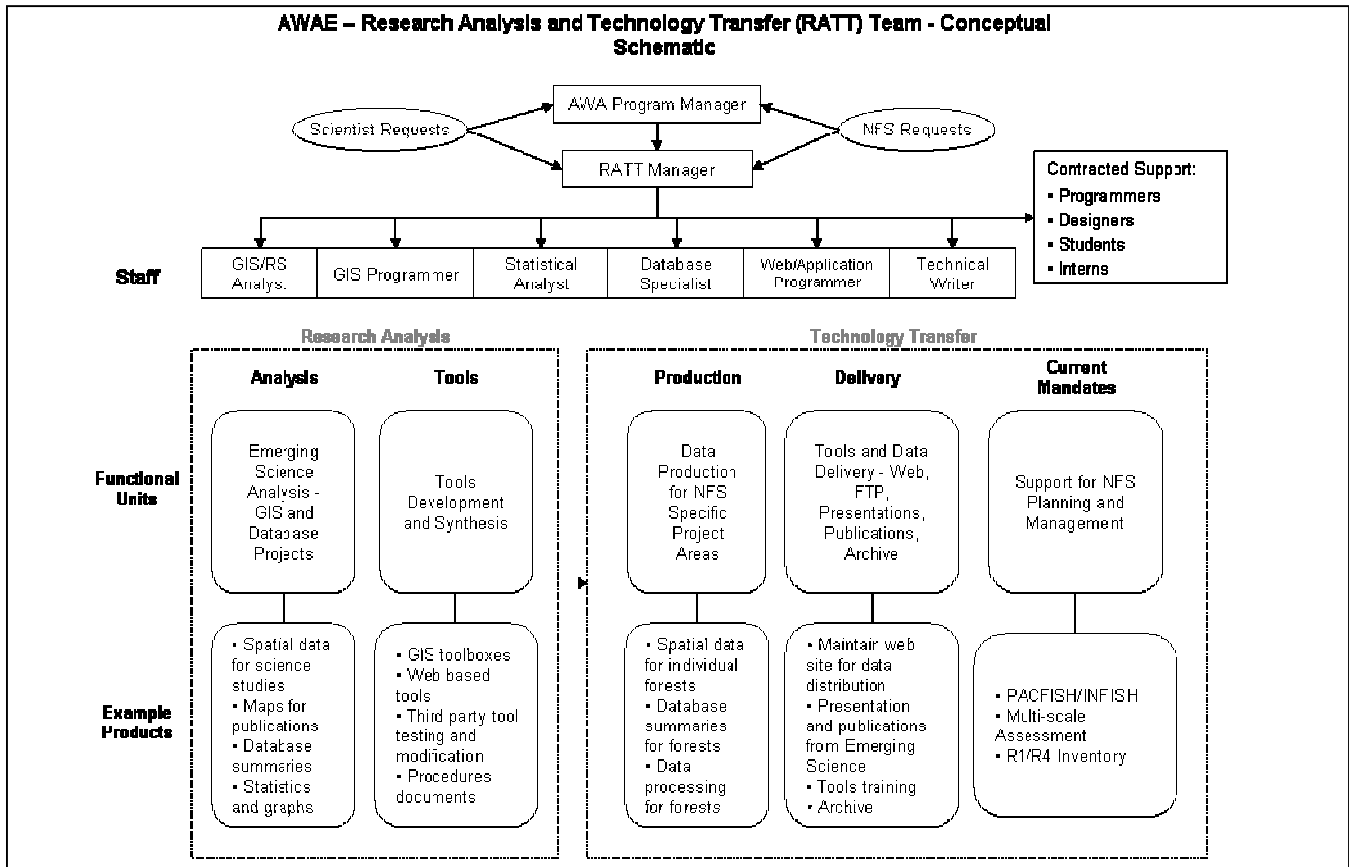
Stream channel bathymetric mapping.



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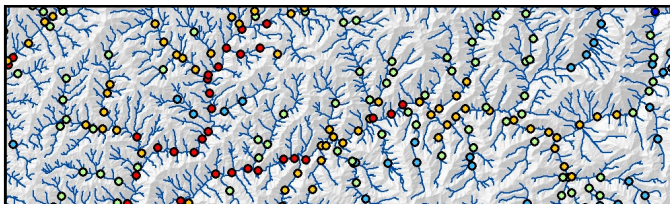
Research Analysis and Technology Transfer

Schematic detailing the staffing skills, functional units, and example products for RATT Team

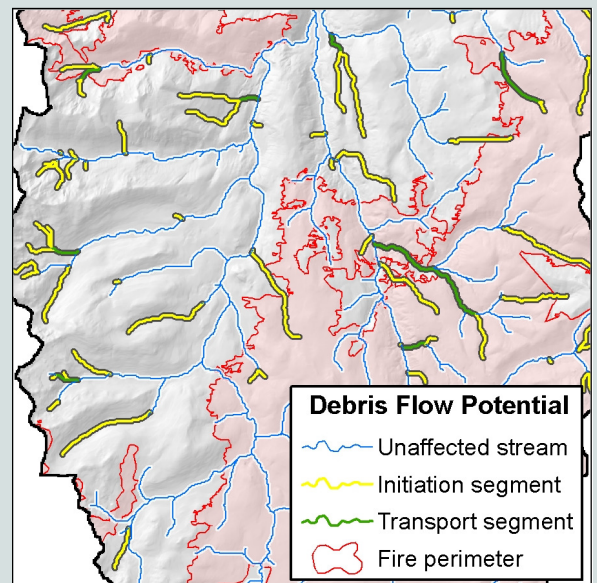


Recent Projects

- Bull trout climate change analysis
- Post fire debris flow modeling
- Stream temperature modeling
- Geomorphic Road Analysis and Inventory model— web page development
- Runoff and Gully Initiation model— web page management
- Watershed patch delineation— GIS programming
- Brook trout invasion—database development
- Integrated fire, fish, and forest decision support model



Stream temperature modeling - blue-red = cool-warm



Debris flow model identifies potentially unstable channels following fire.