



Maps for the masses

Whitefish GIS specialist was integral part of Wedge Canyon fire strategy

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If a picture is worth a thousand words, then the maps Peter Petri of Mobile LoGISTICS Mapping creates might just be priceless.

As the GIS (geographic information systems) specialist for the Wedge Canyon fire, Petri's maps summarized the daily fire situation for divisional supervisors, information officers, air operations and any other special request he received at the incident command post near Polebridge. The walls at the incident command post are covered with maps. Divisional supervisors operate and coordinate teams and plan attacks off of maps, and that's where Petri comes in. Over 16-hour days he created maps in the early hours of the morning or the night before operations. His shaded relief maps highlighted terrain and specified drop points, hot spots, spot fires and escape routes. Commanders assigned divisional crews to areas off of Petri's maps.

"One of the keys of GIS is that it allows you to assimilate data quickly and produce maps; maps for the area. It's their guide for where they are working," Petri said.

He prides himself on the ability to make maps that the masses can understand. Maps are one of the finest formats available to disperse information about fires, he noted. Information officers informed the public using his maps. Chances are any maps the public saw detailing the course of the Wedge Canyon fire came from Petri.

"My most responsive group is the public. People love to see a map, to look at it and see where the fire is. I like to make a cartographic product that is both functional and usable to a wide variety of skill level," he said.

When it comes to mapping natural events, part of the function of a GIS specialist is the ability to bring those maps to the site.

"I can bring a full-service GIS center anywhere -- the deserts or the mountains," said Petri in an interview from his "headquarters," a trailer that contains high speed computers, printers, and internet service via satellite.

Don't let the size of the trailer fool you, because Petri produced hundreds upon hundreds of maps from it. He was a one-man show who detailed worst-case scenarios for fire behavior, property ownership in the area, historical fire perimeters and of course, daily fire growth. Whatever command wanted as far as information projected onto maps, Petri

gave them. As the fire wound down, his detailing of which fire lines needed rehabilitation provided a crucial link for resource assignment, one of the many functions of mapping.

"The rehabilitation maps helped to focus energies; you could see the progress," Petri said. "(The maps) are also a tool for navigation and operational analysis."

Without the evolution of GIS, commanders would be left in the care of a map-maker using pencil and paper.

"It's a lot more accurate than a paper and pencil map, It's another tool in our toolbox," said Don Copple, a situation leader for the Northern Rockies Fire Management Team, "The data gathering process will be used for generations ahead."

Data processing is the beauty of GIS, and set-ups such as Petri's provide the means to map whatever needs to be measured geographically. Give Petri data, and he can put it on a map. Any information. Any map. A ski bum with a very technical background, he has been known to plot out his daily ski runs on a GIS map.

"It's an information management tool. A simple tool for very complex systems," said Petri, whose 11 years of experience in the field of designing system software gives him an insight into how that data is placed on the map, "This whole gig is about a map production shop."

This is big stuff for a man who claims to be basically a ski bum at heart. After 52 straight days on the fire, he looks forward only to winter.

"This is my work time, my day off is the winter."