



A quarterly publication of the
Mount Rainier National Park
Associates.

Volume 9 Number 2

MRNPA News

From the Summit

by John Titland

As most MRNPA members probably already know, this past winter's storms caused extensive damage to roads both inside and in the areas surrounding Mount Rainier National Park. The road from the Carbon River Entrance to the Ipsut Creek Campground will be closed to motor vehicles all summer. State Route 123 between Cayuse Pass and the Stevens Canyon-Ohanapeosh junction may be open some time this summer, but only to alternate one-way traffic. State Route 165 between Carbonado and Mowich Lake is expected to open in early July, but Park visitors will encounter delays as road crews repair the six slides and washouts that occurred along this section.

At this writing, the Westside Road is totally closed due to a slide that blocks the Dry Creek parking area. No anticipated reopening date has been given. The road to Summit and Coplay Lakes, outside the northwest Park boundary, will be closed until the two bridges that fell into the Carbon River and several major slides are repaired.

The White Pass highway (US 12) is open however traffic on the east side of the summit

(Continued on page 2)

It's High Tech Time at Mount Rainier

by Bette Filley

While Northwest techies think of Mount Rainier as being about as far removed from technology as one can get, the fact is that state of the art technology has arrived at the mountain.

Known as the Geographic Information System, or GIS, the system is an all-encompassing digital way of organizing geographic data. The database marries all known information about the mountain into one place, and allows the user to see virtually everything known about any given point or location. It even can give past, present and future projections about that location.

The way it works is this: The GIS database is referenced to locations on the earth, and has precise coordinates associated with it. Since the development of the Global Positioning System (GPS), it is now possible to pinpoint any location on earth. It is those "pinpoints" the GIS uses to reference all known information to one place. The resulting

"picture" is like a stack of pancakes. Users can extract data from any one "pancake" or slice through the whole stack. The bottom pancake, or foundation upon which all the layers sit, is an aerial photo of the entire park and surroundings. The GIS contains themes, coverages, layers and datasets.

A "theme" might be park

(Continued on page 3)

In This Issue:

It's High Tech Time at Mt. Rainier	1
From The Summit	1
Summer 96 Work Parties	3
T-Shirt Contest	5
Write to Congress!	8
Supt Briggles's Response	10

(From the Summit - continued from page 1)

is reduced to alternate one-way travel at temporary bridges across major washouts. And if all this were not enough, construction continues this summer on SR 410 north of the Park boundary between Greenwater and Silver Springs.

With all these road closures and travel disruptions, what should you expect to find when you visit the Park this summer? Traffic congestion and more than normal crowding at Paradise, Sunrise, and the Mowich Lake area! To drive around "The Mountain" may require going almost to Yakima or at best, waiting in line at a one-way section along the slide area on SR 123.

I expect the day trippers who visit the Park on a sunny day will not drive around, but will choose instead to spend more time at Paradise and Sunrise. Because the parking lots at Paradise and Sunrise are limited in size, they will become the bottlenecks. Too many Park visitors will create traffic congestion problems.

The other open destination, the Mowich Lake area, will cause a slightly different problem because parking is not controlled. Even on low visitation days when other areas are open, cars exceed parking lot capacity at Mowich Lake. The only available parking is on the road shoulders.

Visitors headed for Ipsut Creek and Copley and Summit Lakes who find these roads closed, will likely head for the Mowich Lake area as a alternate. Because of these extra visitors, this summer the available parking in the Mowich Lake area may be on the road two to three miles from the lake. Unfortunately, this will not prevent every driver from optimistically checking all the way to the lake and back. A dusty three mile hike to Mowich Lake may replace the pleasant three mile hike to Spray Park.

The Board of Trustees of MRNPA is concerned about the crowding and congestion the coming summer may bring. We have sent a letter to Superintendent Briggie expressing our concerns. We are concerned that this summer's road closures and travel disruptions will cause Park visitors to be funneled into Paradise, Sunrise and the Mowich Lake area causing visitor impacts to be magnified at these three locations.

We are particularly concerned about the potential for overuse at the Mowich Lake area. Because there is no entrance station along the road to Mowich Lake and because there is no limit on the number of cars that can be parked along the road, there is no limit to the number of visitors who can enter the area. It follows that currently there is no way to limit the impacts that visitors can have on this area. The Board sees this as a significant potential problem and we have advised Superintendent Briggie that we will support immediate implementation of controls on visitation should any unacceptable conditions develop.

This discussion is not intended to discourage

MRNPA members from visiting the Park this summer. It is instead a caution to be aware there that Paradise, Sunrise, and the Mowich Lake area may be unusually crowded this summer.

As I have recommended before, try exploring some of the other areas in the Park. Who knows--you may find an area you like even better! If you do go to Paradise, Sunrise, or the Mowich Lake area and you observe conditions you regard as unacceptable, please immediately report them to NPS personnel. This summer we need to be especially vigilant that the Park not suffer increased visitor induced damage.

Different subject altogether ... We are trying to organize and schedule a "retreat" for the MRNPA Trustees and interested MRNPA members to meet and discuss the issues MRNPA should focus on and organizational changes which might make us more efficient in applying our efforts. If you are interested in attending, give me a call and I will make sure you get invited. Schedules and locations are still being discussed so giving me a call is not any sort of obligation to attend.

Officers of MRNPA

President	John Titland -----	(206) 747-1698
Vice-Pres	David Berry -----	(206) 752-3546
Secretary	Sally Soest -----	(206) 860-2865
	jsoest@aol.com	
Treasurer	Bob Aegerter -----	(206) 547-4492
	boba@scn.net	
Editor	Bette Filley -----	(206) 255-5274
Layout	Bob Landen -----	(206) 854-2473
	blanden@wolffenet.com	

The MRNPA News is published periodically by the Mount Rainier National Park Associates of Seattle, WA for the purpose providing general information about issues affecting Mount Rainier National Park in furtherance of the goals of the Mount Rainier National Park Associates - To Maintain, Restore, Nurture, Protect, and Appreciate the natural values of Mt. Rainier National Park.

The opinions expressed in the MRNPA News are those of the authors and do not necessarily represent the official position of the MRNPA.

Letters and articles from members and readers are welcomed. We reserve the right to edit for length, grammar or libel. Articles and comments can be sent to:

Editor, MRNPA News
19801 SE 123rd
Issaquah, WA 98027

(Continued from page 1)

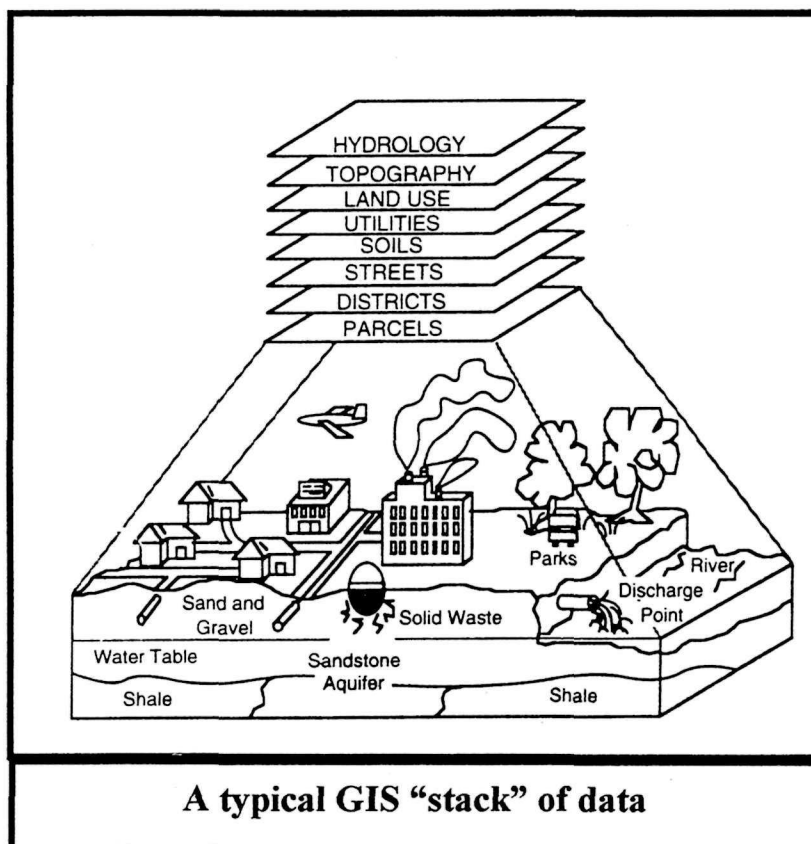
roads. Included within it will be all known data about roads. Superimposed on top of the aerial photos of the present location of the roads, will be old roadcuts which may no longer be evident, an overlay of old maps, engineering drawings, photos, records, notes, and anything else pertaining to roads. Above that are "layers," of such things as trails, streams, bridges, elevations, etc. Each is a database within the GIS. Once all the data is in, you could query any GIS location on any road and know everything about that exact spot, past, present and projected future. The answer will tell the elevation, water features, plants, trees, etc., all geo-referenced.

The power of the Geographic Information System is its analytical capabilities. That's why the GIS was conceived. The government needed such a system for resource analysis. It was developed by the government in conjunction with educational institutions. In addition to suitability analyses, it can also be used for habitat evaluation, viewshed analyses, land use planning, data gathering, basic mapping, route selection and Internet access.

In the beginning, a system called GRASS (Geographic Resource Analysis Support System) was developed in the late 1960's by the Army Corps of Engineers. It ran on huge main-frame computers, and needless to say, was computer intensive, and required an incredible amount of disk storage. The government had many needs for such a system, one among them resource protection within firing ranges during weapons training. They wanted to map with resources in mind. In the early 80's the system converted from main-frames to the new "personal" computers. Since then the GIS has grown exponentially with technology.

As more software was developed, the old original GRASS became the standard for the Park Service as well. They too needed it for resource protection.

Mount Rainier's GIS program began in 1986 and was one of the first parks to have GIS capability. When first begun, Denver was the center for all National Park Service GIS, and Mount Rainier data was put in by phoning Denver and using their computer to analyze



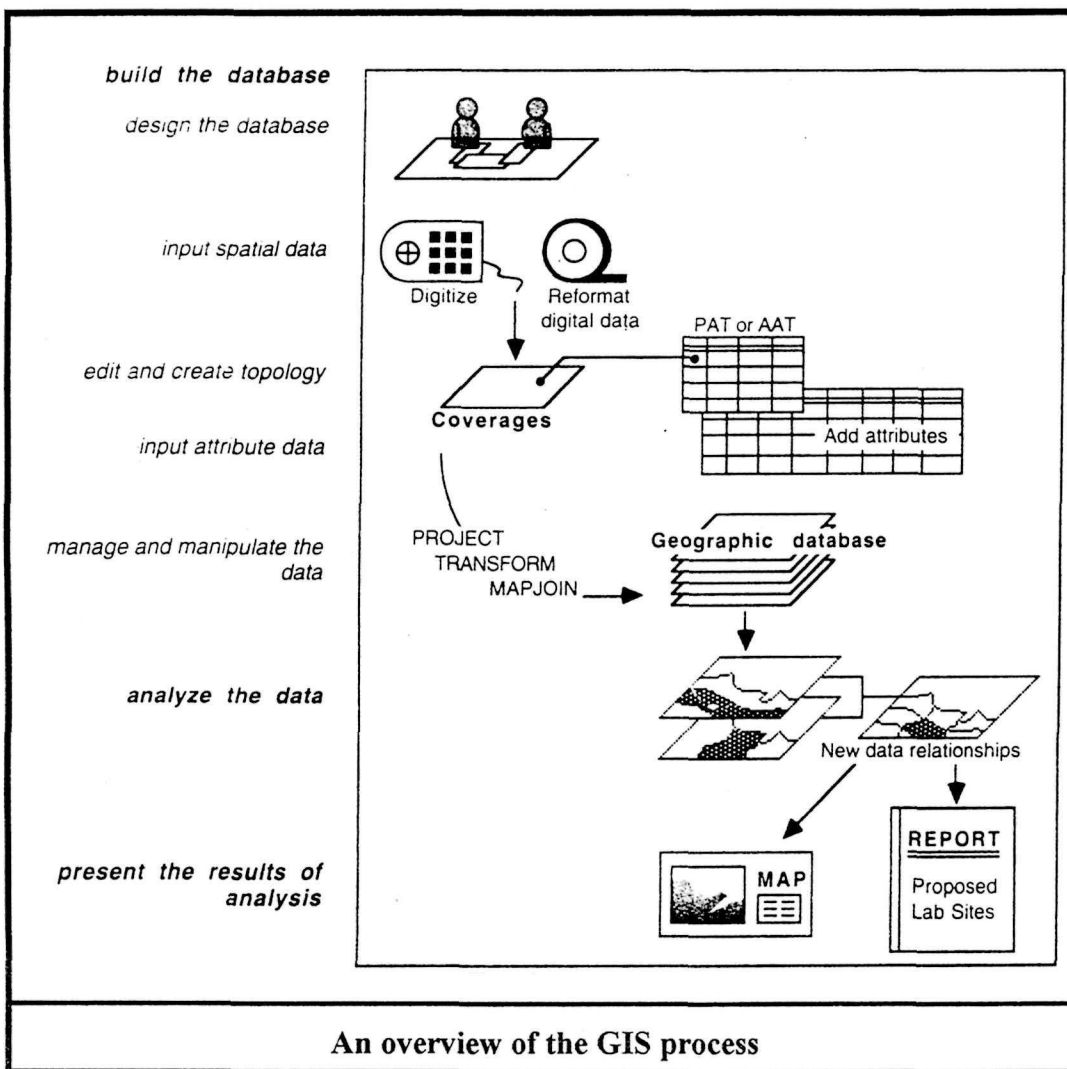
data. A year later, the park was able to purchase a 286 computer running the UNIX operating system and GIS software named SAGIS.

Botanist Dr. Regina Rochefort deserves much of the credit for spearheading the program within the park. It was she who began developing and digitizing themes, acquiring data and doing data entry. (She is now in charge of vegetation and restoration programs.)

In September 1991, Darin Swinney, a graduate of Central Washington University with a degree in Geography, Land and Environmental Studies, was hired as a student intern through the Environmental Careers organization, a non-profit group that finds internship positions for recently graduated students. (The Park Service uses them extensively to find specialized employees.) Darin was hired for a 6 month internship for the job of converting from the 286 computer to a UNIX workstation running the GRASS software.

As it became apparent what a volume of information there was to be made a part of the system, Darin's temporary job kept getting extended. Finally in February 1993, the Park created a permanent GIS

(Continued on page 4)



"outside world": the Internet, World Wide Web, FTP (Telnet, etc.), Park Network (cc-mail and file server), NFS Network, Unix, PC Network for access to the main GIS and when all else fails, "Sneaker Net" (put it on a floppy disk and walk it around to where it's supposed to go).

The central tool is ArcView, a PC Windows GIS software program which is on the Park Network, and is available to all employees who have access to a computer which can run the software.

Other technologies are also available through ArcView access to GPS data. This can bring in other relational databases, including

AutoCAD (drawings) the above-mentioned ICAP (the inventory and maintenance program), and photo databases.

The "heart" of the GIS is the Global Positioning System (GPS). GPS technology makes it possible to obtain precise geographic coordinates for virtually any place on earth in an efficient and convenient way. Given the integral part that location plays in geographic information systems, GPS and GIS are natural partners. GPS is the primary way of getting geographic data (features and elements) into the GIS system. The GPS consists of three parts: 24 satellites which circle the earth, a portable receiver, and a control center (in this case - a handheld unit) on Earth. The best measurements are made when three satellites are 120 degrees apart around the horizon, and a fourth satellite is directly overhead. Reception is extremely accurate.

(Continued on page 5)

(Continued from page 3)

Specialist position, and Darin got the job. That came as a direct result of the park administration's realization of the many benefits they had derived from the GIS to date and Superintendent Briggie wanting the park to go to a far wider use of the system. Whereas initially the GIS dealt primarily with natural resources, it was expanded to assist in *all* operations and all divisions of the park. Supt. Briggie made the commitment to give it adequate support for the purchase the hardware, software and training to make full utilization of GIS capabilities. It was a big commitment and it paid off.

The "tools investment" included plotters, a Global Positioning System, software, computers, digitizers, power supplies, networks, photo and video equipment, personal computers, ICAP (an Inventory, Condition and Assessment program), integrating technology for the resource management and "connectivity." The latter includes connections with the

(Continued from page 4)

Mount Rainier will soon have a state-of-the-art Rockwell system. The new system will be a military unit which will give "real time" accuracy, and put all information received directly into a number of data bases: Microsoft Access, DBase, and/or spreadsheets, etc. Such things as conditions at a specific place can be keyed in, along with the precise location and elevation. It may read: "Vegetation - heather. Weather: freezing." And just to be sure, old reliable data sheets are still used as a backup.

If the GPS is the heart, then the skeleton or frame of the system is the base map, technically known as "Digital Orthophoto Quads." These are photos of the entire park taken at 1 meter resolution, geo-referenced. The "DOQs" are taken by plane, flying strip transects delivered by quads. The fully implemented data base will contain about 20 quads. Each quad takes up about 150 megabytes of computer memory.

Although the photo management system isn't fully developed yet, other (aerial) photos and videos can also be linked into the computer right along with all other information on an area or subject. Eventually it will be possible to get a photo of "spot x" prior to 1950. All the park's photo inventory will be integrated into the GIS. Once the photo base is established, all other data can be overlaid.

When photos are taken now, they come out as digitized pictures on a disk, with all photos in digital format. For higher resolution photography they can be put on a CD.

Today, GIS is a part of every division of the park. (Divisions are Interpretation, Ranger, Natural and Cultural Resources, Planning and Design and Administration.)

Natural Resources are on-line and currently utilizing the system, and it is Natural Resources where most inventory and monitoring of resource applications occur. GIS is used in wildlife management, aquatic resources, vegetation restoration, geologic, air quality, human impact monitoring, research, environmental compliance, wilderness management and endangered species. Utilizing the "picture which is worth a thousand words" aspect, operators can create accurate, page-sized maps of Environmental Impact areas depicting zones or boundaries that could be confusing when described in text. Gary Ahlstrand, Chief of Natural Resources, brings a strong background in GIS to his division, having spearheaded the GIS program in Alaska, and is a solid

supporter of the program.

Within those categories underway involving GIS, there is spotted owl and marbled murrelet monitoring via GIS and GPS locations. All observations will be mapped, along with habitat information, calling stations, nesting trees, nest data, owl photos, tree photos, nearby trail maintenance, the sex of the owls, juvenile studies, survival statistics, elevations, and vegetation. The team is also surveying goat and elk sightings, and surveying amphibians using GIS to define study areas and search locations. A wetlands inventory is being initiated this summer using GIS and GPS.

The system was used when three elk were poached recently inside the North boundary. The evidence mapped with the GPS included where the shell casings and gut piles were located, and where the poachers were caught and arrested. (Let's hope a low-tech judge didn't just give the bums a \$100 fine and their guns back!)

One other specific Natural Resources project underway is the impact monitoring of over 900 social trails in Paradise Meadows. The active program is to restore the meadows and repair the erosion damage of the maze of trails. Each social trail is mapped and linked with all known information, such as elevation, size of trail, (is it greater than 50 meters in length, or is it within 10 meters of a maintained trail), surrounding vegetation, photos, and whether any restoration work has been done, or if it is scheduled for restoration, and in what year. This data can then be used to print out a restoration map, then using a Global Positioning System unit to mark the exact location, flower seeds can be collected from the spot, the seeds then grown into plants, then taken back and planted in the exact spot. It's "technology helping Mother Nature along." A "raster map" showing vegetation is defined by cells of information for every 25 meters.

The Decade Volcano Study will make use of some of the more exotic applications of GIS. Geologists doing volume analysis of the volcano can look at the ridges and valleys, and using GIS, can "fill in" the valleys and get a picture of the way they once looked. They can compare existing volume with previous volume, and calculate how much material was wasted from the mountain during such events as the Osceola Mudflow. It is thought that most material is lost through smaller and more frequent events. While outfits like

(Continued on page 6)

(Continued from page 5)

Tacoma City Light and Pierce County Emergency Planning are interested in the bigger ones, the troops at Longmire are equally interested in the smaller ones.

In the area of Cultural Resources, it can be utilized for archeology, for historic structures and cultural landscapes. When fully implemented, the operator can pull up "Longmire", click on a specific building, and see a photo, the layout of the building, the maintenance record, wiring diagrams, see when the roof was last repaired, when it was last painted, each room layout, and the history of the building.

An archeological overview was conducted in 1995, which included basic mapping of archeological sites, probable archeological locations, basic maps, and a set of parameters where artifacts may likely be found (i.e. native people went to subalpine meadows, around water, etc.). Artifacts probably would not be found in recently disturbed areas such as flood plains, avalanche areas, etc., so those locations are excluded. That narrows down the probability of finding anything, and limits the survey.

This method proved to be fairly successful and there are

now several documented archeology sites ranging from rockshelters down to shavings of rock from the manufacture of arrowheads and primitive tools. The GPS will be used to map the sites. Unlike conventional paper maps which are dated the minute they're printed, "custom" GPS maps make overlay analysis a relatively simple process, and allow viewers to see new relationships between various types of geographic information.

Other Cultural Resource uses are locating and documenting such resources as bridges, cabins and other items on the National Historic Register. Cultural Resource Specialist Craig Strong will be in charge of determining cultural landscapes, and creating the GIS database with that information. There will be an overlap between Cultural Resources and Building Maintenance, since both use the same information. The GIS is the way to coordinate all divisions, and centralizing information, instead of creating discreet little data bases for each group.

Planning and Design will find GIS an invaluable tool in compliance. All construction activities are coordinated by Planning and Design, and GIS will provide the figures for the compliance documents, such as endangered species habitats. Also under compliance, using ArcView, utility features such as telephone lines, water lines, electric lines, and features (of say where the underground Paradise water mains and valves are located), in the event of a major break, by using the GPS to navigate to the site of the problem, the GPS can tell repair crews precisely where to dig through 20 feet of snow to reach the problem. This use alone can save thousands of dollars in needless work and damage.

Park Maintenance will benefit by having all maintenance records readily available, scheduled maintenance slated, supplies used, suppliers, costs, staff and manpower needed, and such extraneous information as whether a helicopter can be flown in if necessary. ICAP is the Maintenance Program which will be interfaced with GIS in the near future. This will require collecting survey information for all data to be put into the ICAP program.

At this point, high-technology will also have to rely on "low-tech" for reliable information. The

(Continued on page 7)

1996 Work Parties!

Work party volunteers, mark your calendars! Work parties for the coming season are tentatively scheduled for the following dates:

Saturday & Sunday August 15-16

Saturday, September 14

The locations for the work parties have not yet been determined, but as in the past, we expect the May 18 event to be in the Carbon river area and the September 14 event to be assisting in planting wildflowers along the trails above paradise.

If you are not yet a work party volunteer and would like to be one or have been a volunteer in the past and think you have been dropped from the list, contact Dick Baker, MRNPA Work Party Coordinator at (206) 282-1064. Dick will add your name to the list of volunteers to be sent specific information about 1996 work parties.

(Continued from page 6)

low-tech is what old timers still remember about where certain things are buried, or connected or hidden, since many such things were not written down. In the early days, when a job needed to be done, or a repair made, some handy jack-of-all trades just went out and did it, and usually never had a thought about making detailed notes.

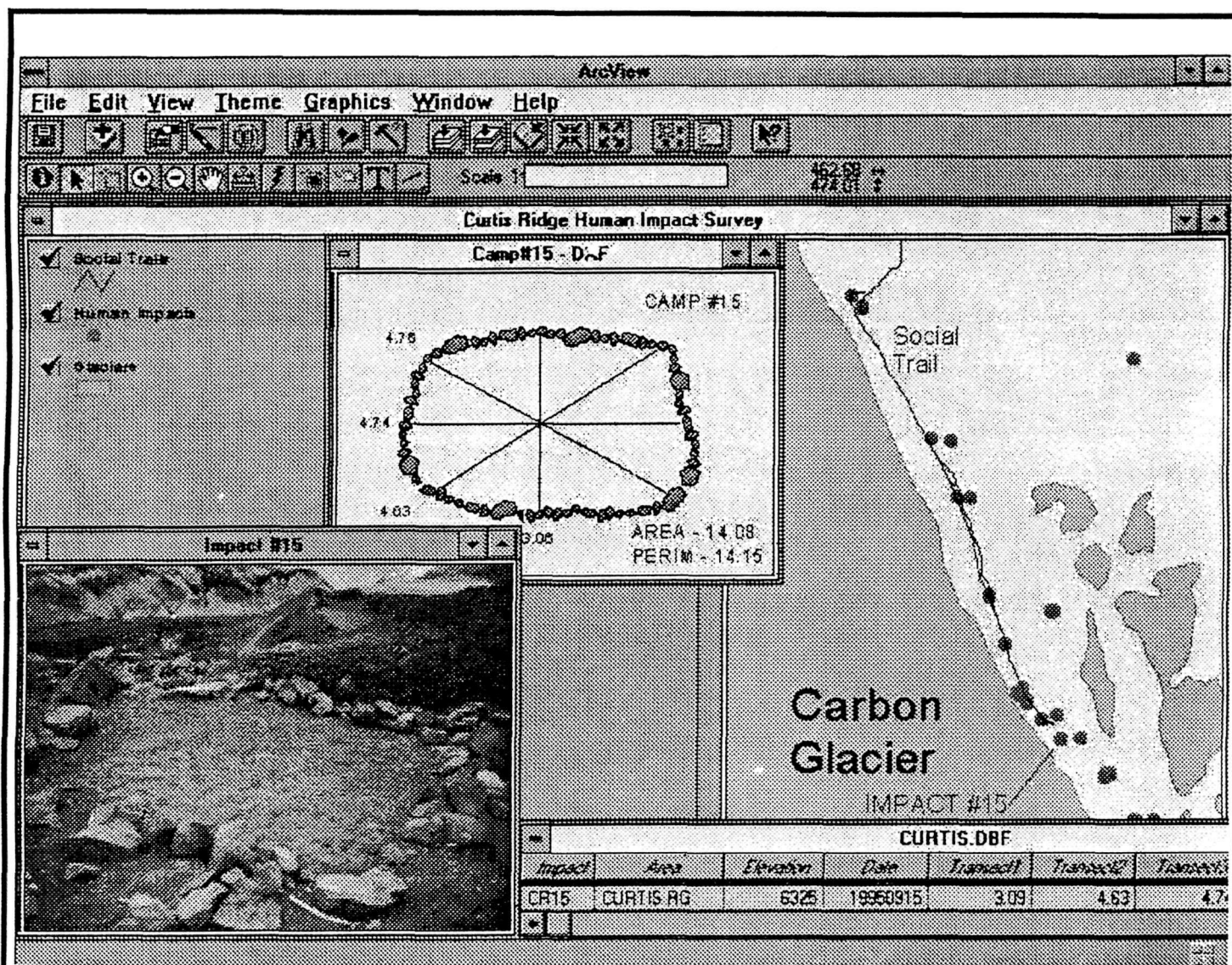
Also covered will be such practical applications as where good and bad radio reception is within the park, all possible winter parking plans, and flood plane mapping (showing 100 and 500 year flood plane maps), high avalanche areas, ski routes and visitor services.

Trails will also be benefited once the entire trail

inventory goes into GIS. (This will be no small task considering the hundreds of water bars, rock walls, bridges, intersections, and trail signs to be itemized and added.) Every sign within the Park, including such data as what information is on the sign, its exact location, what type of sign, what material the sign is made of, the size, the shape, the height of the sign, what type of signpost, when it was placed where it is, and any other pertinent details will be plotted on a map. Blowdowns can be mapped to help figure ways to reroute trails.

One interesting little sidebar concerning trails: Whereas the Wonderland Trail is 92.2 miles of hiking distance, it shows as roughly 70 miles of surface area on

(Continued on page 8)



A GIS-ArcView display combining several data elements stored on human impact in Curtis Ridge.

(Continued from page 7)

a flat map, but the system will show both actual hiking mileage and flat mileage in GIS.

Interpretation has used GIS for such things as visitor handouts, signs, interpretive materials, educational matter, art and mapping. GIS is a great analytical resource and research tool. It can be used to make such "pretty" maps, some look at it as a discipline. Interpretive staff can also get information for talks, and such interesting minutia as how many miles of stream are within the park, acres of trees, cross-country ski routes, where things are permitted, and where they are not.

Climbing rangers now have a new tool to aid in Emergency response planning, and Search and Rescue (SAR). Using the Global Positioning System (GPS), they can program the climbing routes into the system, and in the event of a whiteout, can then use the GPS to navigate down. Following a route previously mapped, they can navigate to within a 4-meter accuracy. (A meter is 3.28 feet). The Communications Center now has ArcView installed, thus when a ranger finds an injured climber, he can determine the victim's coordinates, and then use those to tell the rescue helicopter precisely where to go, and call in the landing zone with exact coordinates.

Lost hikers will benefit from the technology too. Eventually all trails will be plotted on a map, with models showing how far a person can travel in a given time, on-trail or off-trail, uphill vs. downhill. They can plot such a "scenario" for each trailhead, so if someone has been lost for 7 hours, the model can give searchers much valuable information and good starting points of where to look. (Olympic National Park has used their GIS for this function quite a bit, and found it to be a valuable instrument.) It can be used to map what has been surveyed or searched, and what has been missed. A person may think they did a thorough search, but when plotted on a map, it may show that a section has been missed.

Rangers are also zoning the park for their fire management plan. They have maps of all known old burns back to the 1200s. They also are using it for their volcanic hazard contingency

(Continued on page 9)

Western Washington Congressional Addresses

Senator Patty Murray
302 Hart SOB
Washington, DC 20510
202-224-2621 FAX: 224-0238

2988 Jackson Federal Bldg
Seattle, WA 98174
206-553-5545 FAX: 553-0891
E-Mail:
senator_murray@murray.senate.gov

Senator Slade Gorton
730 Hart SOB
Washington, DC 20510
202-224-3441 FAX: 224-9393

3206 Jackson Federal Bldg
Seattle, WA 98174
206-553-0350 FAX: 553-8358
E-Mail:
senator_gorton@gorton.senate.gov

Congressman Rick White
116 Cannon HOB
Washington, DC 20515
202-225-6311 FAX: 225-3524

1st Congressional District
21905 64th Ave. W
Mountlake Terrace, WA 98043
206-640-0233 FAX: 776-7168
E-Mail: repwhite@hr.house.gov
<http://www.house.gov/white/welcome.html>

Congressman Jack Metcalf
507 Cannon HOB
Washington, DC 20515
202-225-2605 FAX: 225-4420

2nd Congressional District
Wall St. Bldg 2930 Wetmore #901
Everett, WA 98201
206-252-3188 FAX: 252-6606
800-562-1385

Congresswoman Linda Smith
1217 Longworth HOB
Washington, DC 20515
202-225-3536 FAX: 225-3478

3rd Congressional District
1220 Main St. # 310
Vancouver, WA 98660
360-695-6292 FAX: 695-6197
E-Mail: asklinda@hr.house.gov

Congressman Norm Dicks
2467 Rayburn HOB
Washington, DC 20515
202-225-5916 FAX: 225-1176

6th Congressional District
1717 Pacific Ave. S
Tacoma, WA 98402-3234
206-593-6536 FAX: 593-6551
800-947-6676

Congressman Jim McDermott
2349 Rayburn HOB
Washington, DC 20515
202-225-3106 FAX: 225-9212

7th Congressional District
1809 7th Ave. #1212
Seattle, WA 98101-1399
206-553-7170 FAX: 553-7175

Congresswoman Jennifer Dunn
432 Cannon HOB
Washington, DC 20515
202-225-7761 FAX: 225-8673

8th Congressional District
50-116th Ave. SE #201
Bellevue, WA 98004
206-450-0161 FAX: 454-0821
E-Mail: dunnwa@hr.house.gov

Congressman Randy Tate
1118 Longworth HOB
Washington, DC 20515
202-225-8901 FAX: 225-3484
<http://home.worldweb.net/tate>

9th Congressional District
31919 1st Ave. S #140
Federal Way, WA 98003
206-839-8308
E-Mail: rtate@hr.house.gov

CUT OUT AND PLACE IN YOUR DAY PLANNER FOR THOSE TIMES
WHEN YOU WANT TO REGISTER YOUR CONCERNS NOW!

(Continued from page 8)

plans, and to produce high, medium and low hazard-risk maps.

Administration overlaps all other divisions, and will include such things as housing, - how many bedrooms each housing unit has, who lives where, is it seasonal housing or permanent staff housing? Much of this input will fall to Theresa Everard, park computer specialist, who will lend her assistance and support in administrative input.

The Decision Support System will help in such diversified areas as knowing how many gallons of paint are needed to paint a room, to where the spotted owls are. Users will be able to put reports on a manager's desk, or the superintendent's desk with far more speed and accuracy. Information can't be used if it can't be accessed, and info not readily available is useless.

Even the General Management Plan will utilize the GIS to project the impact of different scenarios of use.

All this constantly evolving technology requires constant training. In the case of Mount Rainier, this is done by Craig Dalby, the Regional

GIS Coordinator at the System Support Office of the Columbia Cascade Cluster at the NPS Western Regional Office in Seattle. Each employee gets about two weeks of training per year, when funding permits.

Most of the training involves getting end users trained in the use of Windows, ArcView and computers in general. The objective is to get all end-users (the permanent staff) doing a lot of the GIS work themselves. It's the old adage of many hands make light work! Instead of one or two people (Darin and his assistant Doug Roth), having to do all input, everyone will be doing their own data entry, data analysis, and making their own handouts and maps, etc. Once trained, the permanent staff will have this valuable tool to enable them to do more with less time. This will then allow Darin to focus on the more technical and

intensive projects and keeping up with the incredibly fast-paced evolving program. Hardly a week passes that there aren't changes in computer technology, software technology, goals of the Park, techniques, and a dozen other items. Even the hard-to-learn and hard-to-use (and expensive: \$10,000!) ArcInfo operating system yields to customization changes programmed in by Darin.

The government likes plans, and the GIS creates an integrated system which will allow change and flexibility. This entire project will require a considerable investment of time and money in collecting the ICAP data, but once done, it will pay big dividends and benefits forever.

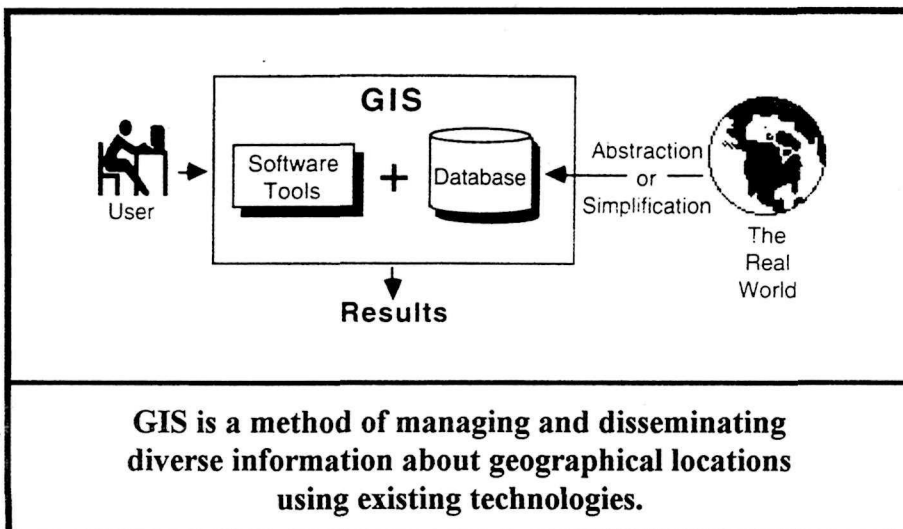
This is an ever-growing, never-ending centralized integrated information management system. It will take years to get up to its full potential, considering the volumes

of material which must be entered into the computer, and even then will never be "complete" since there will always be new data. But with each addition of data and information to the system, those who see it are getting more and more excited about using it, and what it can do. The day will

soon come when the "water-person," the resource person, and the maintenance person can all get together and benefit from each other's input, and each do a better job because of it.

We may also see the day when some of the federal data archives come on line, and there will be good indexes pointing to them. Then even the public will be able to retrieve some data as easily as getting a book out of the library.

The bottom line is that Geographic Information System is the ultimate implement for managing park resources! It truly will contain a wealth of information about the mountain and the park.



A Response...

As a followup to John Titland's *From The Summit* article on Page 1, William J. Briggie, Superintendent MRNP sent the following response to the MRNPA Board letter of June 4:

June 24, 1996

*John A. Titland, President
Mount Rainier National Park Associates
15242 SE 48th Drive
Bellevue, WA 98006*

Dear Mr. Titland:

I am in receipt of your June 4 letter, regarding Mount Rainier National Park Associates' concerns of potential impacts due to winter storm damage to various areas of the park.

I share your concerns and want to assure you that my staff and I are fully aware of potential impacts. I have shared your letter with my staff and we intend to enhance our monitoring and enforcement efforts in those areas particularly vulnerable to increased use.

As stated in a recent press release, State Route 123 opened to alternating one-way traffic at 8:00 a.m. on June 21. National Park Service, Washington State Department of Transportation, and Federal Highway Administration personnel continue to work together to design and construct a permanent repair. Construction is tentatively scheduled to begin AFTER the busy Labor Day Holiday, with an intended completion date by the start of the 1997 season.

In addition, we are very close to signing an agreement with the Tacoma Chapter of the Mountaineers for use of their property, located one-half mile west of the Carbon River Entrance, as a temporary parking area. A trail has been constructed through the damaged area near Falls Creek for pedestrian and mountain bike access. This will serve as an interim measure, that will hopefully reduce potential impacts in the Carbon River area, as well as the "ripple effect" in the Mowich Lake area. It is my intention to convene scoping meeting(s), followed by an Environmental Assessment to address alternative actions for this area.

I look forward to your involvement in this process and your interest in Mount Rainier National Park.

Sincerely,

signed

*William J. Briggie
Superintendent*

With its lofty summit pushing up into the sky and its massive glaciers carving its flanks, Mount Rainier dominates the Pacific Northwest. Recognizing the scenic splendor of this magnificent mountain and the high meadowed ridges and the virgin forests that surrounded it, Congress, in 1899, "dedicated and set apart, as a public park, to be known and designated as Mount Rainier National Park, for the benefit and enjoyment of the people". Mount Rainier National Park became the nation's fifth national park.

The world has changed in many ways since 1899. No longer is Mount Rainier National Park an outpost requiring several days of serious travel to reach. No longer are the Park's boundaries surrounded by seemingly endless forest. Today's Mount Rainier National Park is an island of wilderness in a sea of clear cuts, visited by more than two million people each year.

In 1985 a group of citizens concerned about the future of Mount Rainier National Park joined together to form Mount Rainier National Park Associates (MRNPA) to preserve and protect the natural state of the Park and to promote wise stewardship of its resources. Today MRNPA continues to work toward those original goals. Acting as an independent watchdog and advocate for protection of the Park, we monitor and comment on activities both inside and outside Park boundaries.

MRNPA representatives have testified before Congress on Park issues. We have worked vigorously to oppose projects that we feel negatively impact the Park, such as the proposal to widen Highway US 410 within Park boundaries. We perform volunteer work inside the Park at least three times each year. The work of preserving and protecting the Park needs to be done at all levels and the work continues.

If you share with us a passion for Mount Rainier National Park, concern about its future, and a vision that it should always remain a wild and natural place, we invite you to join MRNPA. As a member you will receive the MRNPA newsletter, occasional special mailings on issues impacting the Park, and invitations to donate your labor during the MRNPA trail maintenance and meadow revegetation work parties. More importantly, you will be supporting an organization that is working to preserve the wilderness beauty and splendor of Mount Rainier National Park "for the benefit and enjoyment of the people" of present and future generations. To become a member, mail your name, address, and \$10 for your first year's dues to:

Treasurer
Mount Rainier National Park Associates
9230-41st Avenue NE
Seattle, WA 98115-3802

FORWARDING AND RETURN POSTAGE GUARANTEED

3411 N. 24th St.
Tacoma, WA 98406

Mount Rainier National Park Associates

NON-PROFIT ORG
U. S. Postage
PAID
Permit No. 885
Tacoma, WA

Mount Rainier National Park Associates Membership Form

Date _____
Name _____
Address _____
City _____ State _____ Zip _____
Home Phone () _____
Work Phone () _____

Membership & Newsletter (\$10.00) ☐

Check here if renewal ☐

Check here if address change ☐

In addition to my dues, I would like to make
a tax-deductible contribution in the amount of:

☐ \$10 ☐ \$15 ☐ \$20 \$ _____

I am interested in helping
in the following area(s):

- | | |
|--|---|
| ☐ Trail Parties | ☐ Adjacent Lands & Boundaries |
| ☐ Newsletter | ☐ Wilderness & Backcountry
Management |
| ☐ Hikes | ☐ Visitor Impacts |
| ☐ Wilderness | ☐ Water |

Please return this form with check
or money order payable to:

MRNPA

Mail to:

Bob Aegerter

Treasurer, MRNPA

9230 41st Avenue NE

Seattle, WA 98115-3802