Chapter Two Planning: The Foundation of a Successful Project

Respect the Land, the Water, the Wildlife and the Rights of Others

Creating a sustainable trail or trail system is very similar to building a house: it takes a vision, a good plan, a solid foundation, sound construction practices, and then proper maintenance to protect the structure's integrity. If the proper time and effort is not spent in each one of these steps, the entire project could be jeopardized.

This is the basis for the concept of the Great Trail Continuum. Each component is equally important and each component must be effectively performed and implemented in order to create a great trail. Some planners look at planning as a white elephant; a paper exercise that wastes time, wastes money, and is not productive. But it is an essential component of the continuum. Why is it called a continuum? Because the process never stops. The team plans, designs, implements, maintains, and manages. Then using the 4Es, the team monitors the results and if something isn't working, members plan, design, and implement corrective action. This is called adaptive management. It is important because a trail is imposed on a dynamic landscape, therefore

the trail and its management must be dynamic. There will always be a need for change.

Chapter 1 discussed the three elements for success: provide for the riders' needs, design for sustainability, and develop an effective O&M program. Neither of the first two elements can be achieved without first planning for them. The essential steps in the planning process are:

- Develop a vision
- Conduct a site assessment
- Refine the vision
- Build a resource map
- Develop a trail concept plan
- Develop trail management objectives (TMO)
- Perform any required environmental analysis
- Build broad-based support
- Assemble the remaining foundation building blocks

THE GREAT TRAIL CONTINUUM



Tip, Trick or Trap?

Tip: A trail is placed on a dynamic landscape, therefore the trail and its management must be dynamic



This is a swamp buggy trail in Florida. Though quite different, the principle of Providing for the Riders' Needs applies here just as in any other OHV trail.

Develop a Vision

Developing a vision means that planners must ask the following questions: What needs to be done? What can be done given the constraints of the site, resource concerns, politics, or management? What vehicle types will be accommodated? What experiences will be provided? What opportunities are there for difficulty levels and challenges? What facilities will be provided? What opportunities are currently being provided in the area or region? What levels of visitation can be expected? Where will this system fit into the big picture; what is the niche? The vision is important because it provides a target or goal. If planners don't know where they're going, they don't know when they get there or, more importantly, they don't know how to get there. The vision should be written down, and the entire project team and stakeholders should be in agreement so everyone is working together toward a common goal. The vision can change as more information is collected about the project area. It also needs to be realistic, attainable, and affordable. It is one thing to obtain funding for construction, but it's another to obtain funding for operation and maintenance in the long term.

Vision without Action is a Daydream. Action without Vision is a Nightmare.

The team also needs to understand the uses that are currently



occurring at the site. Planners should go out and look at the trails; look at the impacts, if any; and talk to the riders to find out what they like, don't like, and want. Planners can then refer back to the first key element for success: provide for the riders' needs.



Without proper planning a great vision can become a trail nightmare.

Planners must understand the use before they can develop a vision.

A key consideration in planning for riders' needs is to

efore understand that OHV riders travel in groups and that generally those groups have a mixture of vehicle types. It is not unusual

for a group to have OHMs and ATVs or ATVs and ROVs. If at all possible, provide a variety of trail widths that interconnect at intervals to accommodate those different vehicle types. By doing this,

a group can ride their respective trails and still have the opportunity to meet up with the rest of their group. It is a definite benefit to have an OHV specialist on the planning team. If one is not available, consider adding a club member, state or provincial association member, or an OHV expert.

Planners should next consider their niche by asking about other opportunities that are currently being provided in the area or region. Will the trail provide something different or unique? Where will customers come from? If most of the customers are within a couple of hours driving distance, most of the use will be day use. If a



The Vision

With no challenging terrain available, this rock garden was created. This group had a blast and spent more than an hour in this 200' section.



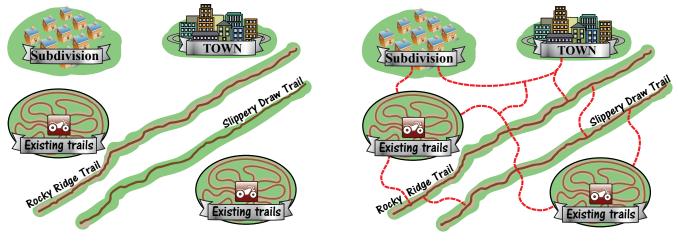
Resorts and campgrounds connected to a trail system offer variety for the riders and a positive economic impact for the surrounding communities.

motorcycle rider can ride 50 miles in a day, then there should be at least 50 miles of trail. However, if customers will be coming from outside of the area, then they will likely be coming for a weekend or long weekend. If that motorcycle rider is here for 2.5 days, there should now be 125 miles of trail or there should be other facilities and activities to occupy the recreational time that customers are on site.

Having a grasp on the demographics has a definite influence on the project planning beyond just the miles of trail being provided. If customers are coming for a weekend, where will they stay? Perhaps there should be a campground, or maybe there are local motels or RV parks that could use an economic boost from the trail system or OHV park. An important consideration, though, is do these existing facilities have adequate parking and turnaround space for big rigs? What about an event area for closed course races, drag races, tractor pulls, or other competitions? Some parks provide non-OHV activities such as zip lines, activity areas for volleyball or badminton, and playgrounds. Other areas provide equipment rentals or food concessions.

Are there ponds or lakes that could provide swimming or fishing opportunities? Could the trail or trail system connect with other trail systems or towns to provide multi-day ATV, ROV, or dualsport touring? If so, there is the potential to create some outstanding and unique recreation experiences. The Hatfield-McCoy trail system in West Virginia and the Paiute trail system in Utah not only provide fabulous riding but also are huge economic boosts to the local economies because they connect the trails to the communities.

All of these potential activities could contribute to the essential element of variety. Few people ride their OHV for 10 hours straight every day. Planners should provide a creative mix of activities and experiences.



Taking isolated trails

and adding connections to make a trail system

Will there be events on the trails? Depending on the soils, vegetation, and topography, trails that will have competitive events may need to be designed differently in order to be sustainable. Many soil types cannot endure a high volume of use in a short duration of time. This also applies to OHV parks where there may not be events on the trails, but there is a high volume of use on generally a low-mileage trail system.

When developing a vision, it is easy to become micro-focused on just the area of concern, but the planning team should step back and look at the big picture. Instead of looking at one trail, planners should look at developing a system of trails. Instead of looking at a group of individual trails, they should look at developing a managed trail system. On a broader scale, planners should

consider if there is an opportunity to link several trails or groups of trails to several communities. All of these can add to the quality of the recreation experience and to the effectiveness of the management of the use.

Conduct a Site Assessment

To continue the vision, the planners need to conduct a site assessment to determine the feasibility of the vision. Will the site support the vision? If not, what can it sup-

Trail system features	Meet riders' needs
Loops	Connectivity
Mileage	Seat time
Dispersal	Seat time
Scenic diversity	Variety
Terrain diversity	Variety

port? The assessment needs to look at the topography, soil types, vegetation, climate, known resource concerns (wildlife habitat, riparian areas, cultural resources, etc.), known management constraints (conservation areas, restrictive management areas, etc.), known stakeholder issues,

existing uses and their impacts, safety issues with the current uses, and the feasibility of adding other recreational activities. All issues need to be assessed and documented. If no one on the team has the expertise to conduct this assessment, consider having a consultant do it. Consultants may see things that the team has not considered and their eyes are unbiased, objective, and professional.

Refine the Vision

So far, the team has acquired: a) an understanding of the physical characteristics of the site; b) a site assessment; c) comprehension of the vehicle types and the OHV recreationists; d) a grasp on the types of experiences to be provided; and e) knowledge of other OHV opportunities in the area or region (niche). With this



This area was assessed to determine its suitability for OHV trails and its recreational value. The result? Outstanding!

broader knowledge, it's time to refine the vision statement. Below is a sample vision statement from the Gypsum City OHV Park in Fort Dodge, Iowa.

Gypsum City OHV Park is a community partnership developed and dedicated to enhance recreational opportunities and promote tourism and economic diversity. With its many diversified activities and year-round usage, the goal is to provide a place where families can enjoy the lowa outdoors in a beautiful well-managed setting. High-quality sustainable trails will provide a range of experiences while well-designed facilities will cater to the needs and comfort of our visitors. The Park will provide a legal designated place for OHV recreationists, and the vision is for the Gypsum City OHV Park to be the premiere destination for not only lowa, but the entire Midwest.

Build a Resource Map

The next step is to build a spatial database with all known information about the site. Often this is called a resource, inventory, opportunity, or constraint map. This data is best recorded as layers in a program such as a geographic information system (GIS). Each type of information is recorded in its own layer, and the layers can be easily turned on or off depending on the type of information needing to be displayed on the screen or map. Commercial-grade global positioning system (GPS) units have the ability to store a wide range of information about each trail or trail segment. These are called data dictionaries and they can be downloaded to form the GIS layers. Data can be collected as to the road and trail widths, use type, grade, trail condition (degradation), surface type, indicators of erosion, condition of road and trail structures, etc.

Many GPS units on the market have the capability of taking photographs and linking them by position to the trail being inventoried. This can be extremely helpful, especially if the planner is not the person collecting the data. The photos can be great tools to show general trail width and condition; indicate trail problems; portray difficulty; portray soil and vegetative type and cover; show existing signing; or highlight unique features, opportunities, or habitats.

The following information should be collected for the resource and planning analysis utilizing existing databases, GPS collected information, and field data.

- Roads divided into major, minor, and primitive roads and classified by federal, state, county, and city ownership
- Existing trails, designated and user-created
- Water features including lakes, ponds, creeks, springs, wells, irrigation lines or canals, known wet areas, known riparian zones, and livestock water troughs

- Utility lines and corridors, both above and below ground
- Fencelines including gates, cattle guards, and corrals
- Grazing allotment boundaries
- Existing facilities including trailheads, parking areas, camping areas, toilets, shelters, motocross tracks, and training facilities
- Property boundaries, road rights-of-way, or other easements
- Known wildlife corridors, raptor nest sites, animal dens (bear, rattlesnake, etc.), beaver dams, etc.
- Known threatened, endangered, and sensitive (TES) species and their habitats
- Known cultural sites
- Noxious or non-native plant populations
- Management area boundaries including old growth, deer winter range, general forest, watershed boundaries, and tree farm license boundaries
- Soil type, and terrain stability
- Vegetative type and cover
- Active commercial operations such as mines or logging
- Existing rock pits, quarries, borrow sites
- Points of interest including lookouts, historical sites, viewpoints, cabins, and wildlife viewing areas
- Any unique features including rock outcrops, cliffs or rimrock, rock slides or scree, interesting formations, unique vegetation, scab flats, and meadows

Tip, Trick or Trap?

Tip: For inventory of the trail centerline, the smoothest GPS tracks will be obtained by riding the trail, but assessing the condition of that trail is best done on foot

The inventory data will be displayed as points, lines and polygons.

Point data are used for controls, points, unique features, nest sites, etc.

 $\overline{\mathbf{VV}}$ Line data are used for fencelines, utility corridors, roads, trails, etc.

Polygon data are used for management boundaries, cultural sites, non-native plant populations, water features, etc.

Although this is a lot of data, planners should remember that the goal is to design a sustainable trail or trail system that protects resource values and provides high-quality recreation experiences. These objectives can only be accomplished by having thorough knowledge of the site.

The next step in the process is to develop a trail concept map. For planners to produce a good product, they need multi-resource, accurate, and complete data. It can be expensive to collect this comprehensive data; however, planning is the building block or foundation of the trail system. It will be cheaper and more efficient to gather the information now than to have a critical resource issue surface after the construction crews and equipment are on site. In addition, the person doing the trail layout and design must be intimately familiar with almost every square foot of the site. When that person stumbles across a trail or other feature that was not on the inventory, every-thing must stop until that feature is explored, GPS inventoried, and incorporated into the trail concept plan as either a designated or closed route. Paying for good data upfront can save project dollars and time later on in the process.



Features like these should be included in the inventory and utilized whenever possible. Who should be collecting the field inventory data? Ideally, from a consistency and continuity standpoint, it should be the trail planners and designers. That way, the same set of eyes and evaluation criteria are used to gather the data and translate it into a plan on paper. Often that is not possible. Sometimes club volunteers gather the data, but they may not have the skills to recognize sustainability issues or understand resource values. Sometimes, agency personnel collect the data, but they may not have a good grasp of desired rider experiences, difficulty, the elements of a sustainable trail, or recognize potential opportunities. Planners could consider hiring contractors with OHV expertise who can gather quality data quickly and efficiently.

The resource map is a working document; therefore, it reflects the information currently available and can change as additional or modified data is obtained.

Develop a Trail Concept Plan

Given the knowledge of the project area, the vision, the understanding of the vehicles to be accommodated, the desired recreation experiences to be provided, and the inventory map, planners can now sit down and start mapping out a conceptual trail system. In designing a trail system, the planners must understand:

- The statutory and administrative requirements
- The resource values and constraints
- The users and their desired experiences
- The landscape
- The issues
- The politics
- The climate
- The existing condition
- The vision

Reserver loop K view point

Creating the concept plan is a complex and cerebral process. Depending on the size of the project area, it can be a huge task. If there isn't someone on the planning team who is qualified to perform this task, it might be beneficial to consult with a professional trail planner. This is also a good time to talk about the importance of developing open, honest working relationships with the resource specialists. These relationships must be based on unbiased professionalism and trust. Without that, the cohesiveness and the effectiveness of the planning team could be diminished.

A Case in Point...

The planning for the Shoshone OHV Trail System in north central Nevada began in 2003. The members of the local club, the Northern Nevada ATV Association, were excited and anxious to get a new riding opportunity. They spent years attending meetings with stakeholders, the county, and the Bureau of Land Management. The environmental analysis process took years to complete and then was further delayed by an appeal. During that time, there was a change in the county commissioners and support at that level was no longer assured. It took eight years before construction could finally begin and by then the energy of the club had waned, membership had dropped, some members had developed health problems, and others had quit out of frustration. However, the club as a whole prevailed. Without the dedication and persistence of the club, the project may not have come to fruition. Not only is the development of the trail concept plan a huge step in the process, it is the first step that produces a tangible visualization of what the project will look like. Up until now, there is usually only a map with a project area boundary on it. Having a visual aid can stimulate and encourage the planning team and invigorate the clubs and potential volunteers. Getting from project inception to trail concept plan can take years. It is very difficult for any group, especially one made up of volunteers, to maintain energy and enthusiasm for that long of a period. The trail concept plan is a good tool to take to the stakeholders so they can see how the proposed trails may affect their interests. Lastly, having the trail concept plan in hand is a huge advantage when seeking grants or other funding opportunities.

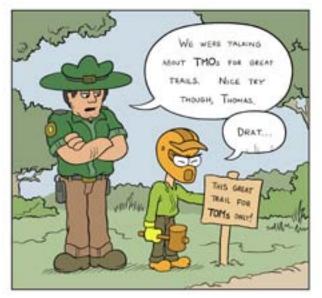
The development of the trail concept plan is the true foundation of the trail system, and it is such an important step it is discussed more thoroughly in the next chapter. Once the trail concept plan has been reviewed and any necessary revisions made, the next step is to develop alternatives if necessary.

Develop TMOs

The trail management objectives (TMO) document describes the use and management of a trail and outlines the following:

- The primary uses and vehicle types
- Other allowable uses
- The desired recreation experience: transportation road, recreation road, trail, loop trail, destination trail
- The intended difficulty level (this may change once the trail is finally located on the ground)
- Design guidelines including clearing width, tread width, and grades
- How the trail will be constructed: machine or handbuilt
- Maintenance frequency and methods
- Trail management such as open all year, seasonally closed for wildlife, closed during wet season
- Frequency of trail inspection and assessment
- Any specific resource concerns or issues associated with the trail including grazing allotment, wildlife, cultural sites, sensitive plant sites, water quality, and nearby residents

By documenting this data, TMOs provide continuity as well as operation and maintenance consistency. Personnel will change, but the trail will still be on the ground and the new personnel will need to know the vision and intent. Over time, the TMOs should be reviewed and revised as use, use type, climate, and landscape changes occur.



The TMOs are the thread that weaves the continuum together. The designer must know the intended user, the intended difficulty level, and how the trail will be constructed. Construction personnel must know the user and the difficulty so that technical features like rocks, logs, and roots can be left or removed. Maintenance personnel must understand the use, the desired experience, and difficulty in order to properly maintain the trail (so they know to cut out a log or keep a technical feature). Whoever is inspecting the trail needs to understand the resource values and determine if they are becoming impacted. Those people also need to determine if the trail is still providing the desired experience or difficulty level and ascertain if maintenance, reconstruction, or relocation is warranted.

Perform Any Required Environmental Analysis

A lot of good solid data and work has gone into the formation of the trail concept plan, so it can often be used as the proposed action in the environmental analysis process. Each agency, state, or province has different legal requirements and processes for environmental review. It is absolutely critical that their requirements be identified and followed. Environmental review can add months or years to the project planning but that time period can be reduced by having a solid trail concept plan based on sustainability and resource protection.

On federal land in the United States, the National Environmental Policy Act (NEPA) legislates the environmental review process. Under that umbrella, each federal agency then adopts additional regulations and policies for their jurisdictions. There are three levels to NEPA and each level increases in process and complexity.

First is Categorical Exclusion (CE or Cat Ex), which is a category or list of actions that, barring extraordinary circumstances, do not individually or cumulatively have a significant effect on the quality of the environment. These categories vary widely between agencies; however, designation or construction of new roads and motorized trails are not generally included. Depending on the agency, a CE may be used for minor reconstruction or relocation of an existing trail.

Second is Environmental Assessment (EA), which is the most common and used when the expected effects of the proposed action are well understood to have no significant impacts. The process usually, but not always, explores alternative ways to achieve the purpose and need, analyzes the effects of those alternatives, and affirms that the selected alternative with appropriate mitigations has no significant environmental impacts. If the EA concludes with a Finding of No Significant Impact (FONSI), the environmental review process is complete. If it doesn't, then the EIS process must be followed.

Third is the Environmental Impact Statement (EIS). This process is used for projects that may have a significant environmental impact. An EIS will almost always explore more than one alternative that meets the purpose and need. The alternatives display options and trade-offs between significant issues. The EIS discloses the effects of those trade-offs and how they will be mitigated and concludes with a Record of Decision (ROD).

Often, the processes for an EA and EIS are similar in that both have:

- Purpose and need statement: What is it and why is it needed?
- Proposed action: A course of action that could be taken.
- Scoping: Asking for public input for issues, concerns, opportunities, or other courses of action. Sometimes this is done through public meetings.
- Alternatives: Usually one of these will be no action or no change, one will be the proposed action, and then one or more alternatives to the proposed action.
- Analysis: Review of effects of the proposed action versus the alternatives.
- Public review and comment.
- Final agency decision: A final document with a ROD or FONSI and required findings is issued, often with administrative appeal opportunities. The final could be altered from the draft due to the public comments.

Scoping and Stakeholder Involvement. Scoping is an essential component in the NEPA process. While not every project goes through the NEPA process, in every project area, there are individuals or groups who have an interest in the area or who could be directly affected by the project. Scoping needs to be done to determine the interests and stakeholders. A contact list should be developed and those stakeholders notified of the project and its progress. This is important because any or all of the interests may have issues or concerns with



Trail enthusiasts need to be good partners to help agencies develop their trails.

Tip, Trick or Trap?

Tip: Planning Virtues:

- Patience
- Persistence
- Long-Term Commitment

the proposed trails in the project area. It is far better to flush those issues out early, rather than to have irate opponents surface later. When all of the issues are on the table, planners can address them either by changing the trail concept plan, developing another alternative, or changing the scope or level of mitigations. Time allows the planners to better understand the issues and also allows the opportunity to build a working relationship with the interested public.

There are two types of interested public: special interest groups and stakeholders. Special interest groups have an indirect interest, advocacy, or philosophical position. These groups lobby for a position and they could be OHV groups, conservation groups, or timber groups. Stakeholders are individuals, groups, or entities that have a direct and active interest in the project site. Stakeholders could include riding club(s), private inholders, range permittees, timber interests, mining interests, other tenure holders, neighboring residents, utility companies with corridors through the project site, irrigation districts, tribes and First Nations, hunters, and other trail user groups.

A Case in Point...

The NEPA process was followed for the Lost Ox OHV Trail System in Ely, Nevada. An EA was prepared, a FONSI was signed, and there were no appeals. Grants were secured and a contract was let to perform trail layout and design. Several months later, four hunters realized that the project could affect "their interests". They went to the county commissioners and got their support in opposition to the project. That group had been in favor of the project until a recent election changed the commisioners. Then the hunters went to the media and started beating the war drums of emotionalism. A town hall meeting was held followed by more meetings with the Bureau of Land Management. The result? The Decision was vacated, the contract cancelled, the project forever dropped, and a loss of more than \$1 million in grant funds. The NEPA process was followed, but could the outcome have been different with more scoping and public involvement early on?

Sometimes the stakeholders are brought together as a aroup with regular meeting dates. These can be called an advisory committee, oversight committee, or steering committee. These committees can be a good forum for an open discussion of the issues. They can also be a forum for heated debate. collusion of interests, and shifting focus to positions (to interests that impede rather than expedite the process). If a group is formed, an experienced and impartial moderator should facilitate the group to keep it focused and moving in a positive direction.

It can be more effective to meet with the stakeholders individually rather than in a group, and it is

very productive to conduct that meeting in the field if possible. In the field, it is easier to deal with the real issues, the conversations tend to be less polarized and dramatic, and the perspective of the issues and scope of the landscape is much better than gazing at a map. Like the resource specialists, it is important that planners develop a positive, professional working relationship with the stakeholders. This relationship does not stop when the planning is finished, it continues through the implementation and beyond.

No discussion about stakeholders, planning, and environmental review processes would be



A meeting with stakeholders in the field.

complete without talking about the 3Ps: politics, politics, politics. There are politics in everything, including in a family, club, state and provincial organization, and work environment. Certainly, in dealing with relationships with stakeholders, interest groups, the land managers, and their staff planners must put on their political hat and diplomatic face. This is not a realm where the "damn the torpedoes, full speed ahead" approach is appreciated or effective.



Building one-on-one relationships with stakeholders. At left, the Okanagan Trail Riders Association (OTRA) uses its operator and equipment to help the range permittee dig up and repair plugged up pipes to a water trough. Below, the OTRA worked with the representative of the tree farm license holder to install barriers and signs to deter hillclimbing at a private gravel pit.



Involvement means building trustful working relationships, even with people who may have very different philosophies. Successfully working with multiple interest groups can be like walking a tightrope. Smiles and sincerity can open doors; negative body language and careless remarks or actions can close them. A wise man once said that there is a time to talk and a time to listen. The wise approach when walking into a new group is to listen first and talk second or not talk at all. By listening, planners can better understand issues, agendas, underlying motivations, and under the table alliances. Listening builds trust and allows planners time to mold their thoughts into effective comments.

Change happens often in planning, including with use levels; use types; climate; sensitive plants and animals appear and disappear; sometimes trail locations, grades, and structures are tried, but they didn't work as expected; and sometimes there are errors in the initial planning or implementation that need to be corrected. Since a trail lays on a dynamic landscape, the trail and its management must be dynamic. In the NEPA process, two ways to facilitate change are 1) survey and assess the effects of a trail corridor, not just a trail, and 2) include adaptive management verbiage in the NEPA document.

Establishing a corridor of 50, or better yet a 100, feet on each side of the trail centerline gives the designer room to make final alignment or grade adjustments prior to construction. It also provides flexibility during construction to move the trail slightly if solid rock or other unsuitable material is encountered. And finally, as the planning team moves along the continuum into long-term maintenance and management, a corridor allows room for minor relocation of the trail as the condition of the trail, its use, or its environment changes.

A Closer Look...

Adaptive Management Advantages:

- Flexibility to change
- Increased sustainability
- Proactive management
- Increased rider satisfaction
- Decreased resource impacts

Adaptive management verbiage means including a few sentences in the NEPA document that say: "If this happens, the team will consider or do that." For example, "If use increases to the point where the trail is no longer sustainable in its current location, the team will consider moving it". Or "If there is a catastrophic fire or weather event that affects the sustainability of the trail, the team will consider moving it". Some simple wording in the body of the document and consideration in the effects section can expedite the need for changes later on because the change is still meeting the intent of the document.

Build Broad-based Support

Some people vehemently dislike OHVs. This sentiment can complicate the planning process as managers and planners need to sort out the physical issues from the emotional issues. Physical issues can usually be addressed and mitigated; emotional issues are more difficult to resolve. The issue of sound can be mitigated, but "I don't like OHV noise" cannot. Because of this, it is critical that the OHV club provides support to the planners and land managers and that they speak with a unified voice.

A Case in Point...

Let's go back to the Lost Ox OHV Trail System in Ely, Nevada. The project was initiated by the BLM in an effort to be pro-active in providing for and managing the rise in OHV use. There was no local ATV club, so there was no local support base. Even though there are a lot of ATVs used for ranching and hunting, most of those users did not see the benefit in developing a trail system since they could already ride almost anywhere they wanted. So when the support of the county commissioners was lost and the media turned negative and there was a public outcry to stop the project, the BLM was left standing alone and they couldn't support the project.

The more people or groups that work together, the stronger the planner's position will be to promote and defend the project. It's never fun to stand alone in a sea of adversity, so having partners and supporters is a definite advantage. Some of the best partners can be stakeholders who can see a direct benefit to themselves. Talk to them individually, find out their needs or concerns, and determine how the project can address them. City officials, county commissioners, and regional

Tip, Trick or Trap?

Trap: Don't fall into the trap of arguing or defending your project or position in the media

districts can also provide a good support base. Planners should talk to them and show them how the project benefits the community and the economy. Local support is far more effective than non-local support, so while it is a benefit to have a letter of support from state or provincial officials or user associations, that support is not the same as support from those who are directly affected.

This is another arena where effective use of the 3Ps is essential. The media tends to feed on con-

tention because that's what sells their product; however, sometimes planners can find reporters who are interested in the project and fairly report what they see. This is an asset, so planners should capitalize on it. Opponents will focus the media on negative aspects of the project. Planners need to turn that around and find, focus on, and highlight the project's positive aspects.

Assemble the Remaining Foundation Building Blocks

Several other components or building blocks are necessary to complete the planning foundation. Just as having broadTip, Trick or Trap?

Trap: All non-motorized recreation groups are opposed to motorized recreation. This is a trap because opening new motorized trails which allow non-motorized recreation can create additional opportunities for all trail users.

based support builds solidity, planning documents also add to the solidity of the project. They can answer questions before they are asked, can address concerns early on, and put the planners and managers in a proactive, knowledgeable position. These documents include the management plan, sign plan, map, architectural theme, barrier design, monitoring plan, interpretive plan, and rehabilitation and erosion control plan.

Management Plan. A management plan provides programmatic direction and guidance, and includes these key components:

- Documents the vision
- Fully describes the trail and facility opportunities to be provided
- Establishes the vehicle and rider rules and regulations
- Establishes hours of operation, seasons, and weather restrictions
- Establishes who will administer the site and who will perform operation and maintenance

- Discusses whether there will be events
- Documents the decisions of the steering and advisory committees
- Discusses OHV use of roads
- Outlines the mitigation of issues
- Describes who will perform enforcement
- Outlines the role of volunteers
- Discusses who will do education
- Lists design guidelines for trails and facilities

Sign Plan. Signing and mapping are the two primary means that management has to communicate with its customers while they are on site. Simple, consistent, effective signing is critical to the success of any project. The sign plan establishes direction regarding the types of signs, shapes, colors, messages, materials, and placement.

Map. While it's too early in the process to produce a user map, planners can



still include an example of what the map could look like. It is more important to have a map be functional than to have it look pretty and be expensive. The map must be rider friendly and effectively provide riders with the information they are looking for.

If the signs and the maps do not clearly work together and tell the riders where they should go, the management for the area has failed. This will cause impacts. Since these areas are critical, they will be discussed in more detail later in this book.

Architectural Theme. Many projects have an architectural theme to give the project an identity and a brand. Sometimes the theme conforms to the recreation opportunity spectrum (ROS), which provides guidance for the look and recommended materials in a setting that ranges from primitive to urban.

Barrier Design. Barriers control and direct use. Planners should have a barrier design that is used con-

sistently throughout the project. Just like signing, riders learn to recognize a barrier and what it means. Barriers do not need to be tall, obtrusive, physical barriers. A low barrier that blends with the setting can be more effective and visually appealing. The riders' eyes are constantly scanning to pick a line to ride. It doesn't take much of a barrier for the roving eye to see that a potential pathway is not the best line.

Monitoring Plan. There are two types of monitoring plans: formal and informal. Formal plans are specific and scientific. They involve establishing photo points, plots, and data collection points to measure and





A hydrologist monitors the stability of a beaver dam above this trail.

record changes in the trail or surrounding environment. They can include water quality monitoring or radio collaring game species to assess changes in behavior and physiological effects. Formal monitoring often requires specialized equipment and specially trained personnel which make it expensive and labor intensive, two attributes that are generally in short supply. When budgets get cut, monitoring is often on the top of the list. This can result in incomplete data that doesn't result in a conclusion. It can also put the managing agency in the awkward position of not doing what it said it was going to do.

Formal monitoring plans need to be:

- Relevant: What information does the team really need to know?
- Feasible: Can the data be obtained with the available personnel and equipment?
- Affordable: Given budget limitations, what data gives us the most useful information for the dollar?

Informal monitoring is the fourth E in the 4Es: Evaluation. What is really happen-



Talking with the riders regarding their experiences at your trail system is important. Be sure to talk about all aspects including the trails, the facilities, the signing, the mapping, etc.

ing? These are simple questions with readily attainable answers through observation, photos, trail counters, user surveys, and rider encounters. Are the trail management objectives being met? Are resource protection measures effective? Is there a high level of customer satisfaction? Is there compliance with the rules and regulations?

Informal monitoring has three elements: observe, record, report. Most field-going personnel including volunteers become the observers. Data can be collected with digital cameras, and information can be recorded on a simple monitoring form. The forms and photographs then need to be turned in to the person responsible for storing and compiling the data.

Interpretive Plan. Motorized recreationists are no different than any other recreationists; they like to understand their natural environment and learn about the history and geography of the area. Interpretation can benefit management



This interpretive sign adds to the rider experience along an ATV trail.

by giving riders an understanding and appreciation of various resources or resource management activities and objectives. Interpretive sites can serve as destination points for the riders, they add seat time, and they increase the overall recreation experience of the riders. The sites are a winwin. Interpretation can be elaborate with expensive kiosks, or simple self-guided handout information with numbered posts along the way. Interpretation can engage resource specialists in the project area, it can bring a myriad of potential partners to the table, and it can provide new sources of grant funding. **Rehabilitation and Erosion Control Plan.** This plan describes the methods that will be commonly used to close and rehabilitate prior impacts or undesignated trails or areas. It also explains the tools that will be used to control erosion and protect water quality during and after construction. If specific problem areas are known, the plan should address specific remedies for each site.

Most of these plans can be simple documents that don't take a lot of time or money to prepare and some of these plans can often be incorporated into the management plan. Of all, the sign plan can be the most intricate and complex, but it doesn't

Mitigation plan Design guidance Trail concept Project support plan Project Enforcement Management plan plan d found Solid Sign vision plan Media pla Rehabilitation plan

The more solid the foundation, the more likely the project will succeed.

have to be. Sometimes, a few representative pictures of typical signing could suffice. The important point is that all of these plans serve as blocks that build a solid foundation for the project. The broader the foundation, the more stable the structure, and the more likely it will succeed through project implementation.

If the project is an area with existing unmanaged OHV use, there could be a maze of user-created trails, resource impacts, social conflicts, negative media, and public outcry. All of these can complicate the planning process because it becomes difficult to separate the past from the present and future. There is another element: fear. Fear over what has happened in the past and fear over what could happen in the future.

Some tips to help deal with those issues and build positive relationships:

- Be patient, but persistent.
- Work to build trust at all levels.
- Do what was agreed upon and document it.
- Seek professional advice.
- Utilize the 4Es and all of the tools in this book.
- Maintain the high road.
- Address issues because they don't go away.
- Recognize that conditions will change; the past is not the future.
- Record everything new or changed on the project site.
- Use photos and brief verbiage in project newsletters or implementation updates.
- Be willing to conduct multiple field trips with stakeholders.
- Focus on the big picture, not on minor setbacks.
- Feed positive, pertinent, and truthful information to the media and stakeholders.

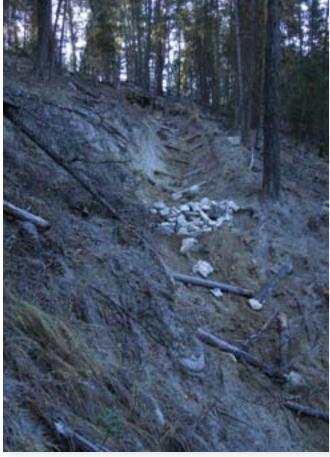
A rock check dam being constructed to control erosion and stabilize a gully created by an old hillclimb.



Some great trail planning strategies:

- Minimize the use of roads. Due to their large tread watersheds, roads are generally not sustainable and will increase maintenance costs. Roads increase speed, decrease seat time, and can decrease the recreation experience.
- Minimize the use of existing trails. Most existing trails were not designed and purpose-built for the use and most are not sustainable and will lead to resource impacts and increased maintenance costs.
- Seize opportunities for new construction. Most purpose-built trails are sustainable and provide a higher level of resource protection and rider experience.
- Maximize the use of existing structures to reduce construction and maintenance costs and reduce resource impacts.
- Plan for change in the landscape, climate, use type, or use level.
- Include adaptive management verbiage in NEPA documents and provide a corridor for the trail.

Here, water quality and sedimentation were an issue. Woody debris was placed in a herringbone pattern between rock check dams in a heavily eroded trail leading to a creek that feeds the community water intake.





Major structures like bridges, culverts, and fords are expensive to build and maintain. It is becoming increasingly more difficult to install these structures due to water quality or aquatic species regulations. Utilizing existing structures on roads, trails, or railroad grades can reduce cost, reduce process, and reduce potential resource impacts.

A Look Back...

Here are some of the planning elements discussed in this chapter:

- Develop a clear vision to guide the planning process
- Conduct a site assessment. The assessment will give the planner in the office a clear picture of what is on the ground.
- Refine the vision
- Conduct a thorough inventory and build a resource map
- Develop a trail concept plan
- · Consider creating trail systems, not just trails
- Develop TMOs
- Conduct any required environmental analysis
- NEPA basics: CE, EA, EIS
- Include adaptive management verbiage and/or corridors
- Understand the importance of stakeholder involvement, including rider involvement
- The 3Ps: Politics, Politics, Politics
- Build broad-based support for your project
- Assemble the remaining building blocks of the project foundation:
 - Management plan Sign plan Map Architectural theme Barrier design Monitoring plan Interpretive plan Rehabilitation and erosion control plan