

Oro Valley Trails Task Force Report

INTRODUCTION

The purpose of this report is to accelerate the implementation of the Town of Oro Valley's Trail System. Our primary audience in preparing this report included Town Council, Oro Valley Parks and Recreation Advisory Board, Planning and Zoning Commission, Development Review Board, Town Departments, Town staff and trail advocates.

The Oro Valley Trail System is a network of unpaved trails for the shared use of hikers, mountain bicyclist and equestrians for recreating and accessing commercial, institutional, and recreational facilities in the Town of Oro Valley. This trail system is also an important component of Pima County's regional trail system.

The Town Council committed to establishing a public trail system with the adoption of the Town's General Plan in 1996 and the Parks, Open-Space and Trail (POST) Master Plan in 1994 and 1999.

During the planning process for the Town's 1994 POST and the 1996 Focus 2020: Town of Oro Valley General Plan, residents identified the lack of trails as a problem. A survey for Oro Valley residents commissioned during the General Plan revealed that 94% of those surveyed participated in recreational activities on a regular basis. Another insight from General Plan explained that the perception of large expanses of open space is important to residents to maintain a sense of place and to ensure that hiking or riding involves something approaching a wilderness experience. In addition, trails were identified as having the highest priority for government funding. As a result of these findings, goals and policies were developed with the intent of creating a community trail system.

The trail system envisioned in the POST Plan and General Plan is still a work in progress. Just over 1/3 of the Town's trail system is "protected", leaving 2/3 of the trail system vulnerable to private property issues, concerns over liability, maintenance responsibilities and other factors.

A community trail system is attainable and will help solidify the Town of Oro Valley as a great place to live and work!

The report is organized into four parts. The first section is foundational information including Scope of Work, Historical Background, Trail System Analysis, Threats, Recommendations and Benefits. The second section provides detailed information for specific trail segments. Section three of the report provides important reference materials addressing Implementation Tools, Trail Standards, Funding, Maintenance, Liability, Security, Trailhead, and Homeowners Associations. The final section is an Action List suggesting specific tasks, dates for completion and who is responsible.

SCOPE OF WORK

The Oro Valley Town Council appointed a seven-member citizen task force to address four areas of the Town's approved trail system as defined in the Parks, Open-Space and Trails (POST) Master Plan .

The four areas of focus include:

1. Verify proposed trail routes and recommend trail standards
2. Research land ownership
3. Prioritize threatened trails or trail accesses and identify protection options
4. Consider other trail opportunities

Historical Background (See Historic and Current Trails Map)

The Town's proposed trail system was first identified in the Eastern Pima County Trail System Master Plan adopted by the Pima County Board of Supervisors in 1989. Implementation of Pima County's trail system has occurred incrementally through the development process. In 1994, the Town of Oro Valley adopted the same trails identified in the Eastern Pima County Trail System Master Plan as part of the Town of Oro Valley's POST Master Plan. (See 1999 POST Master Plan Map)

Behind the chronology of adopted trail plans by the Pima County and Town of Oro Valley, are trail users that have passionately advocated for trails and public access. Recreational trail use has been occurring in Oro Valley and the surrounding region for years, especially by equestrians. A map illustrating an inventory of past and present trail use underscores the important role trails have been in Oro Valley. The trail inventory map compared against the approved trail system and protected trails maps helps the reader understand the significant loss and vulnerability of trail opportunities.

Trail System Analysis

Land Ownership

Understanding property-ownership in relation to the Town's proposed trail system is essential, as 64% of Oro Valley's proposed trail system is on private land. The Town's proposed trails are organized under three categories related to property-ownership. The categories are Protected, High Opportunity and Low Opportunity. All trails are important. The difference between High Opportunity and Low Opportunity trails is largely a matter of implementation strategy and timing.

Protected Trails are trails where public access is legally secured.

High Opportunity Trails are trails controlled by few (1 to 3) private landowners or the property is a potential candidate for re-zoning.

Low Opportunity Trails are trails controlled by many (4 or more) private landowners and the property is an unlikely candidate for re-zoning.

Pima County Trails are linkages or extensions to the Town’s proposed trail system outside of the Town’s jurisdictional boundary.

TABLE 1 shows the status of Oro Valley’s proposed trail system based on the above definitions.

TABLE 1. ORO VALLEY’S PROPOSED TRAIL SYSTEM-LAND OWNERSHIP

Protected Trails	36%
High Opportunity Trails	38%
Low Opportunity Trails	14%
Pima County Trails	12%

Trail Use

The intent of the Oro Valley trail system is to accommodate hikers, mountain bikers and equestrians (shared-use) on all proposed trails. Exceptions to this rule might include environmental, legal or physical constraints; disconnected trail segments not reasonably accessible to all trail user groups, insufficient resources (money, land, etc) to develop single-use trails. Four trail-use categories were identified: shared-use, hiker/mountain bike-use, hiker/equestrian-use and hiker-use. TABLE 2. Illustrates how the largest percentage of Oro Valley’s proposed trail system is shared use.

TABLE 2. ORO VALLEY’S PROPOSED TRAIL SYSTEM-TRAIL USE

Shared-Use (Hiker/ Mountain Bike/Equestrian)	86%
Hiker/Equestrian-Use	12%
Hiker/Mountain Bike-Use	0%
Hiker-Use	2%

Trail Condition

The condition of Oro Valley’s trails is described in this report as either improved or unimproved.

Improved trails are definable paths, constructed trail, or signed corridors for the benefit of trail users.

Unimproved trails are proposed or undeveloped travelable routes.

Understanding the condition of Oro Valley’s proposed trails is important for planning and budgeting purposes.

TABLE 3. ORO VALLEY’S PROPOSED TRAIL SYSTEM-TRAIL TYPES

Improved Trails	17%
Unimproved Trails	83%

Trail Types

Trails are most often placed on land with marginal development value or with other linear type development such as roads. These lands include washes, roads, utility corridors, rights-of-way, easements, and other land uses. Most of Oro Valley's proposed trail system is located along secured corridors or land with development restrictions. TABLE 4. Shows the breakdown of the various trail types.

TABLE 4. ORO VALLEY' S PROPOSED TRAIL SYSTEM –TRAIL TYPES

Washes	55%
Utility Corridors	20%
Rights-Of-Way	13%
Roads	7%
Easements	1%
Other	4%

Threats (common to all trails, see individual trails for specific problems)

1. Time

Trail opportunities that existed 10 years ago do not exist today. 10 years from now, there will be fewer opportunities to develop trails than right now. Retrofitting trails is more expensive than integrating trails at the beginning of the planning and development process similar to roads and sidewalks.

2. Resolve and Resources

The Town Council can take the lead to accept responsibility for the maintenance and liability of the Town's proposed trail system. A large percentage of the Town's trail system (52%) crosses private property. Property owners need a clear understanding of who will be responsible for the liability and maintenance of trails intended for public use. Clarifying the Town's willingness to accept trail liability and maintenance will increase opportunities for the Town to negotiate public access across private land.

It is recommended that funding for trails should be allocated each year as part of the Town's overall budget. Monies are needed for trail design, construction and maintenance. Town funds can also be used to leverage state, federal and other funding sources. It may be time for the Town to evaluate the need for a property tax to fund the quality of life and recreational improvements identified in the general plan.

It is recommended that a staff person be dedicated specifically to implementing the trail plan. An assigned full or part-time staff person to implement the trails plan could coordinate with other Town Departments, contact landowners, work with developers, and seek additional funding.

Recommendations

The following recommendations serve as guidance for implementation and management of the Town's trail system. These recommendations are not listed in order of priority, as some may be pursued concurrently.

- A Town Council resolution clarifying responsibility for the liability and maintenance of Oro Valley's trail system
- Provide well-distributed shared-use public trailheads to disperse trail users.
- Hire a full or part time trails coordinator or redirect duties of a current staff member to include 50% of their time devoted to implementing the Town's trail system
- Establish a permanent citizen's trail committee
- Add a page to the Town's web-site with information about the Town's trail system
- Add trail projects to the Capital Improvement Plan
- Seek other sources of funding to augment the Town's trail budget.
- Monitor and enforce trail easements
- Establish a mounted (equestrian and bike) police/volunteer program to patrol trails
- Adopt ordinances and subdivision codes that will support the implementation of the trails plan, encourage linking secondary trails with the Town's trail system, provide access from neighborhoods and businesses to the Town's trail system, and ensure compliance to the Town's approved trail standards
- Institute a trail impact fee to benefit the Town's trail system
- Request Pima County assistance to secure trail corridors linking with Oro Valley's trail system
- Prepare an annual trail implementation action plan

Benefits

Social

Trails provide an important arena for public interaction. All ages have increased freedom to transport themselves to places they want to go to. Opportunities to construct and maintain trails help promote community pride and ownership.

Environmental

Trails direct people away from sensitive habitat and concentrate use to reduce impact to natural resources. Air quality and wildlife mortality is improved because fewer automobiles are on the road.

Health

Inactivity is the second leading cause of death in America, as reported by the Center for Disease Control (CDC). Close to home trails, provide individuals with the opportunity to be physically active.

Economic

Trails are an important “quality of life” indicator. *“Urban trails are regarded by real estate agents as an amenity that helps to attract buyers and to sell property. Single-family homes, town homes, apartments, and condominiums are regularly advertised as being on or near a trail or greenway. Trails and greenways are considered lifestyle enhancements and are usually included in the sales package for a property.”* (Alexander 1994, p. 6) This statement seems to substantiate local developers who frequently reference trails in their promotional sales materials and advertisements.

Safety

There are many individuals walking, jogging and riding along Oro Valley’s road system. The Town’s trail system increases pedestrian safety because trails are typically separated from the Town’s road system. Below grade crossings at major highways is an added measure of safety. Regular patrolling of the trail system by the police department or by volunteers would address most other safety issues.

PROTECTED TRAILS

Protected Trails are trails where public access is legally secured. 36% of Oro Valley's trail system is protected.

Cañada del Oro (CDO) Wash Trail, # 2 (wash bottom)

Problems:

- ❑ The trail crossing at Overton Road has limited vehicular sight distance creating a hazard for trail users
- ❑ There is no trail access to CDO Wash from the east and west sides of La Cañada Drive
- ❑ There is no outlet for trail users on the floodwall side in the event of a flood
- ❑ Motorized recreation use
- ❑ Many residents do not know the CDO Wash is for recreational trail use

Recommendations:

- ❑ Provide directional signing and informational signing at major access points/trailheads
- ❑ Place equestrian/pedestrian signs approaching CDO Wash on Overton Road
- ❑ Extend the La Cañada Drive Trail from Linda Vista Drive to CDO Wash
- ❑ Enforce Oro Valley's current ordinance prohibiting motorized vehicles in the washes

Uses:

- ❑ Hiking, Equestrian (soft sand makes mountain biking difficult)

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead
- ❑ Catalina State Park

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Random trail alignment

Funding Sources:

- ❑ Pima County Open Space and Trails Bond
- ❑ State Heritage Funds
- ❑ Challenge Cost Share (National Park Service)

Cañada del Oro (CDO) Wash Trail, #2 (flood wall west of La Cañada)

Problems:

- ❑ Unclear access from La Cañada Drive
- ❑ No clear connection to other proposed trails at the west-end
- ❑ Many residents do not know the CDO Wash floodwall is for recreational trail use

Recommendations:

- ❑ Provide access from La Cañada Drive and connections to proposed trails at the west-end
- ❑ Provide directional signing

Uses:

- ❑ Hiking and biking

Public Access:

- ❑ Cañada del Oro Riverfront Park (via Lambert multi-use path/La Cañada Drive bike path)
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail on top of hardened floodwall

Funding Sources:

- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ Pima County Open Space and Trails Bond
- ❑ Pima County Flood Control
- ❑ State Heritage Funds
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Cañada del Oro Wash Trail, #2 (flood wall east of La Cañada Drive at Cañada del Oro (CDO) Wash bridge to Oracle Road)

Problems:

- ❑ Secondary wash inlets into the main channel of the CDO Wash create gaps in the floodwall. These gaps are especially a problem to bicyclist because they have to carry their bikes across the drainage.
- ❑ Unclear public access points
- ❑ Unclear linkages to the Town's bike paths
- ❑ Connection across First Avenue

Recommendations:

- ❑ Construct pedestrian bridges to link flood wall sections
- ❑ Create connectors to the Town's bike path system
- ❑ Construct paved ramps under the First Avenue bridge to link the flood wall paths
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead
- ❑ Home Depot Parking Lot
- ❑ Fry's/Target Parking Lots

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail on top of hardened floodwall

Funding Sources:

- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ Pima County Open Space and Trails Bond
- ❑ Pima County Flood Control
- ❑ State Heritage Funds
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Loma Linda/CDO Access Trail, #217 & #240

Problems:

- ❑ Reoccurring erosion problems on the Linda Vista Boulevard segment
- ❑ Signs needed at Calle Concordia Road crossing alerting drivers of trail users
- ❑ Reoccurring erosion problems on the Logan's Crossing segment
- ❑ Site distances from Linda Vista Boulevard to Loma Linda Road north terminus may not be adequate for shared-use

Recommendations:

- ❑ Address erosion problems as a whole
- ❑ Provide directional and warning signs

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Varies by segment (Hardy to Calle Concordia trail is on east side of road. Calle Concordia to end of Loma Linda trail is on west side of road, end of Loma Linda to Linda Vista trail follows a 50' water easement, Linda Vista Boulevard segment trail follows road, top of Logan's Crossing development to Cañada del Oro Wash Trail follows a 15' easement)

Funding Sources:

- ❑ Logan's Crossing Homeowners Association
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Funds
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

La Canada Dr. Trail, #224 (Calle Concordia to Cañada del Oro (CDO) Wash**Problems:**

- ❑ Steep hill is a hazard to most trail users

Recommendations:

- ❑ Reconstruct trail around steep hill in the La Cañada Drive Right-Of-Way (R.O.W.) and connect trail with the CDO Wash via the La Cañada Drive R.O.W.
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail is located on the eastside of road

Funding Sources:

- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ Pima County Road Bonds
- ❑ State Heritage Funds
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Linda Vista Boulevard. Trail, #226 (La Cañada to trailhead east of Oracle Road)

Problems:

- ❑ No trail is in place
- ❑ No through access from La Cañada Drive to Oracle Road
- ❑ Crossing at Oracle Road is difficult for equestrians because the traffic signal time is too short

Recommendations:

- ❑ Construct trail per trail standard recommendation
- ❑ Secure easement to create an east west link
- ❑ Provide directional signing
- ❑ Provide means for equestrians to increase crossing time at the Oracle Road signalized intersection
- ❑ Nominate trail to the State Trails System

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead
- ❑ Linda Vista Boulevard Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail is to be located on the north side of road

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Funds
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Calle Concordia Trail, A-8 (La Cañada Drive to Forest Service boundary east of Oracle Road)

Problems:

- ❑ Trail is not constructed per design guidelines
- ❑ Oracle Road crossing traffic signal is too short for equestrians to cross safely
- ❑ No parking is available at the forest service boundary

Recommendations:

- ❑ Construct the trail per trail design guidelines
- ❑ Provide directional and informational signs
- ❑ Work with Coronado National Forest to construct a parking lot at the end of Calle Concordia and the Forest Service boundary
- ❑ Provide a means for equestrians to increase the crossing time at Oracle Road and Calle Concordia

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead
- ❑ Linda Vista Boulevard Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Locate trail on the south side of road

Funding Sources:

- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ TEA-21
- ❑ Coronado National Forest
- ❑ Challenge Cost Share (National Park Service)

Camino De Anza Trail, #218

Problems: None

Recommendations:

- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail follows road

Funding Sources:

- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Camino Coronado Trail, #218

Problems: None

Recommendations:

- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail follows road

Funding Sources:

- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Poppy Trail, #33 (La Cholla Right-Of-Way (ROW) from Glover Road to Limewood Drive)

Problems:

- ❑ Trail is not constructed per trail design guidelines

Recommendations:

- ❑ Construct the trail per trail design guidelines in coordination with the Public Works Department.
- ❑ Coordinate trail connection to the north with Pima County
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail is in La Cholla ROW West Side of Road

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Funds
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Glover Road (west of La Cañada) north to Moore Road following a wash Trail, #325

Problems:

- ❑ Trail is not constructed per trail design guidelines
- ❑ Does not connect with the Oro Valley proposed trail system
- ❑ No general public access

Recommendations:

- ❑ Construct the trail per trail design guidelines
- ❑ Coordinate northern extension of trail with landowner/developer
- ❑ Provide directional signing
- ❑ Link to bike and multi-use pathway system

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ No public access is available

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment needs to be field verified

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ Challenge Cost Share (National Park Service)

Trail, #326 (Naranja Town Site)

Problems:

- Trail(s) location is not decided.
- Limited access from neighboring developments
- No public access
- Not linked to the Town's proposed trail system

Recommendations:

- Locate trail(s)
- Determine access points from neighboring developments
- Develop trailhead facilities
- Identify connections to the Town's proposed trail system
- Add trail(s) to the State Trail System (Arizona State Parks)
- Provide directional signing
- Work with Naranja Town Site Steering Committee

Uses

- Hiking, Biking, (Equestrian?)

Public Access:

- No public access is currently available

Trail Design Guidelines:

- See Trail Design Guidelines, Page 44-45
- Trail alignment needs to be field verified

Funding Sources:

- Developer(s)
- Town of Oro Valley Capital Improvement Plan
- TEA-21
- Challenge Cost Share (National Park Service)

Trail, #327 (Naranja Drive - near Western Area Power Authority Line - north to ½ mile north of Tangerine Road following a wash)

Problems:

- Trail is not constructed per trail design guidelines
- Not connected to the Town's proposed trail system
- No public access

Recommendations:

- Construct the trail per trail design guidelines
- Identify north and south linkages to the Town's proposed trail system
- Nominate trail to the State Trails System (Arizona State Parks)
- Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ No public access is available

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment needs to be field verified

Funding Sources:

- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Honey Bee Canyon Trail, #33 (Rancho Vistoso Blvd bridge at Honeybee Canyon to Oro Valley boundary)

Problems:

- ❑ Not accessible to equestrians.
- ❑ Honey Bee Trailhead is in private ownership
- ❑ North and south links to the Town's trail system have not been secured
- ❑ Perceived conflict with wildlife habitat
- ❑ Concerns of over-use by trail users

Recommendations:

- ❑ Construct the trail per trail design guidelines to accommodate shared-use
- ❑ Town of Oro Valley to obtain control of parking area and related facilities
- ❑ Coordinate with Pima County to secure northern connection to Tortolita Mountains
- ❑ Coordinate with landowner/developer to secure southern connection to the Big Wash Trail
- ❑ Address wildlife and over-use concerns.
- ❑ Provide directional information and interpretive signing

Uses:

- ❑ Hiking, Biking, Equestrian (soft sand will be difficult for bicyclist)

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Random trail alignment following wash

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Programs
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

HIGH OPPORTUNITY TRAILS

High Opportunity Trails are trails controlled by few (three or less) private landowners or the property is a potential candidate for re-zoning.

Poppy Trail, #33 (Oasis Road to Naranja Drive)

Problems:

- ❑ Trail crosses private property
- ❑ Southern connection to Pima County trail segment is not secured
- ❑ No clear trail from Casa Adobes Baptist Church, La Cholla Boulevard entrance to the sewer easement road on the north end of the property

Recommendations:

- ❑ Work with landowners to secure public access
- ❑ Identify trail alignment from Casa Adobes Baptist Church, La Cholla Boulevard
- ❑ Entrance to the sewer line road at north end of property with landowners
- ❑ Construct the trail per trail design guidelines to accommodate shared-use trail recreation
- ❑ Coordinate with Pima County to secure southern connection
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment needs to be field verified (significant segments follow a sewer easement road)

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

(West) Trail, #161 (Oasis Road to Lambert Lane)

Problems:

- ❑ Trail crosses private property
- ❑ Connects with a trail outside Town of Oro Valley's boundaries that has multiple private landowners
- ❑ Loose, sandy wash bottom

Recommendations:

- ❑ Work with landowners to secure public access.
- ❑ Construct the trail per trail design guidelines to accommodate shared-use trail recreation.
- ❑ Coordinate with Pima County to secure southern trail connection.
- ❑ Provide directional signing

Uses:

- ❑ Hiking, (Biking?), Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be field determined

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #327 (Lambert Lane to Naranja Drive, east of Western Area Power Authority (WAPA) Line, west of First Avenue)

Problems:

- ❑ Proposed trail crosses private property
- ❑ Must cross Lambert Lane. to connect with Lambert multi-use path and the Cañada del Oro Wash Trail
- ❑ North end of trail does not connect with the Town's trail system

Recommendations:

- ❑ Work with landowners to secure public access
- ❑ Identify safe crossing at Lambert Lane
- ❑ Explore possible Moore Road connection to the Honey Bee Canyon Trail
- ❑ Construct the trail per trail design guidelines to accommodate shared-use trail recreation
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to field determined (follows a dirt road, but the area is being planned for development)

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Funds
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #328 (Cañada del Oro (CDO) Wash to Tangerine Road at bridge, east of First Avenue)

Problems:

- ❑ Proposed trail crosses private property
- ❑ No clear connection to the CDO Wash floodwall trail for bicyclist
- ❑ Not an approved POST trail

Recommendations:

- ❑ Work with landowners to secure public access (The Kai family has indicated support for trails)
- ❑ Identify connection to the CDO floodwall for bicyclists
- ❑ Construct the trail per trail design guidelines to accommodate shared-use trail recreation
- ❑ Nominate trail to the State Trails System (Arizona State Parks)
- ❑ Amend Parks Open-Space Trails Master Plan to include trail
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be field determined (sewer access road is presently used as a trail)

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Big Wash Trail, #33 (Cañada del Oro Wash to Tangerine Road @ bridge)

Problems:

- ❑ No clear connection to the CDO Wash floodwall trail for bicyclist
- ❑ Proposed trail crosses private property

Recommendations:

- ❑ Work with landowners to secure public access
- ❑ Identify connection to the CDO Wash floodwall for bicyclists
- ❑ Construct the trail per trail design guidelines to accommodate shared-use trail recreation
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Wash bed random trail alignment. Wash shoulder trail alignment on top of hardened floodwall

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Big Wash Trail, #156 (Tangerine Road at bridge, past Rancho Vistoso Boulevard, to Oro Valley Town boundary)

Problems:

- ❑ Proposed trail crosses private property
- ❑ Trail alignment has not been identified
- ❑ Proposed golf course could adversely impact trail

Recommendations:

- ❑ Work with landowners to secure public access and trail alignment.
- ❑ Construct the trail per trail design guidelines to accommodate shared-use
- ❑ Address wildlife concerns
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian
- ❑

Public Access:

- ❑ Canyon Del Oro River Front Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be determined by landowner and representatives of Oro Valley

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Honey Bee Canyon Trail, #33 (Western Area Power Authority line to Rancho Vistoso Boulevard)

Problems:

- ❑ Proposed trail crosses private property
- ❑ A stone dam built in a narrow canyon of Honey Bee Wash is a barrier to bicyclists and equestrians to reach the upper Honey Bee Canyon
- ❑ Sandy bottom wash may be difficult for bicyclists to negotiate
- ❑ Perceived conflict with wildlife habitat
- ❑ Potential for over use

Recommendations:

- ❑ Construct the trail per trail design guidelines to accommodate shared-use
- ❑ Coordinate with landowners/developers to secure public access
- ❑ Remove enough of the stone dam to allow biker and equestrian access, and stabilize remaining dam structure, or re-route trail through Honey Bee Park
- ❑ Address wildlife concerns
- ❑ Provide directional, informational and interpretive signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment random through wash bed

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #331 (Moore Road connection to Western Authority Power Area line and Big Wash)

Problems:

- ❑ Proposed trail crosses private property
- ❑ A trail alignment has not been determined
- ❑ Unclear how the proposed trail would link with Moore Road
- ❑ Not an approved Parks, Open-Space Trails Master Plan (POST)

Recommendations:

- ❑ Construct the trail per trail design guidelines to accommodate shared-use
- ❑ Work with landowner to obtain permission for a public trail and its location
- ❑ Identify how the trail would cross Rancho Vistoso Boulevard and link with Moore Road
- ❑ Amend POST plan to include trail
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #326 (Tangerine Road to Moore Road, east of Copper Springs Trail and west of Mountain Drive)

Problems:

- ❑ Land ownership status unclear
- ❑ Proposed trail does not connect with the Town's trail system
- ❑ Trail corridor has not been ground-truth
- ❑ The area is almost fully developed with high-end residential homes

Recommendations:

- ❑ Clarify land ownership and verify public access options
- ❑ Work with landowner(s) to secure public access
- ❑ Identify opportunities to link with the Town's trail system. A possible connection may be from the Naranja Town Site via Trail #330.
- ❑ Ground truth trail corridor.
- ❑ Provide directional signing
- ❑ Nominate to State Trails System

Use:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Naranja Town Site
- ❑ Verify connections to bike or multi-use path linkages

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be field determined

Funding Sources:

- ❑ Developers
- ❑ Town of Oro Valley's Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ Land & Water Conservation Fund
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #325 (Moore Road to one mile north, east of La Cañada/King Air Drive)**Problems:**

- ❑ Proposed trail crosses private property
- ❑ A trail alignment has not been determined
- ❑ Not an approved Parks Open-Space Trail Master Plan
- ❑ The trail does not connect to the Town's proposed trail system
- ❑ No public access
- ❑ Not a part of the State Trail System

Recommendations:

- ❑ Construct the trail per trail design guidelines to accommodate shared-use
- ❑ Work with landowner(s) to secure public access
- ❑ Identify opportunities to link with the Town's trail system
- ❑ Ground truth trail corridor
- ❑ Amend Parks Open-Space Trail Master Plan to include trail
- ❑ Provide directional signing
- ❑ Nominate to State Trail System

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ No public access

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be determined by landowner with Oro Valley approval

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

#33 Trail (SW corner of Neighborhood 11 to Honeybee Canyon Wash junction)

Problems:

- ❑ Proposed trail crosses private property
- ❑ Landowner has publicly stated no public trails in Neighborhood 11
- ❑ A trail alignment has not been determined
- ❑ Rugged terrain would make it difficult to construct a shared-use trail
- ❑ Perceived conflict with wildlife habitat.
- ❑ Reliance on Pima County to provide a western connection to the Town's trail system

Recommendations:

- ❑ Work with landowner(s) to secure public access.
- ❑ Ground truth trail corridor.
- ❑ Construct the trail per trail design guidelines to accommodate shared-use.
- ❑ Coordinate with Pima County to secure trail connections from the County's jurisdiction to the Town's trail system.
- ❑ Address wildlife concerns
- ❑ Provide directional signing

Use:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Honey Bee Canyon Trail, #33 (north and west boundaries of Neighborhood 11)

Problems:

- ❑ Proposed trail crosses private property
- ❑ A trail alignment has not been determined
- ❑ Reliance on Pima County to provide north and east trail connections to the Town's trail system
- ❑ Perceived conflict with wildlife habitat

Recommendations:

- ❑ Coordinate with Vistoso Partners to identify a trail alignment and secure public access
- ❑ Construct the trail per trail design guidelines to accommodate shared-use
- ❑ Coordinate with Pima County to secure a northern and eastern connection to the regional and local trail systems
- ❑ Address wildlife concerns
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be determined by landowner with Oro Valley approval

Funding Sources:

- ❑ Developer(s)
- ❑ Town Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Western Area Power Authority (WAPA) Line Trail, #180 (Tangerine Road to Rancho Vistoso Boulevard)

Problems:

- ❑ Utility easement does not grant public access
- ❑ Vistoso Partners has controlling interest for the WAPA utility corridor and does not want to accept responsibility for liability and maintenance of a public trail
- ❑ Vistoso Partners will relinquish their control of the WAPA utility corridor to the Rancho Vistoso HOA at some point in the future
- ❑ Trail is not part of the State Trail System

Recommendations:

- ❑ Work with landowners to secure public access
- ❑ Approved Town Council resolution for the Town of Oro Valley to accept responsibility for the liability and maintenance of the Oro Valley trail system
- ❑ Nominate trail to the State Trail System

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment would follow dirt access road

Funding Sources:

- ❑ Developer
- ❑ Homeowners Association
- ❑ Utility Company
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Western Area Power Authority (WAPA) Line Trail, #180 (Moore Road to Oro Valley's northern boundary)

Problems:

- ❑ Utility easement does not grant public access
- ❑ Vistoso Partners has controlling interest for the WAPA utility corridor and does not want to accept responsibility for liability and maintenance of a public trail
- ❑ Vistoso Partners will relinquish their control of the WAPA utility corridor to the Rancho Vistoso HOA at some point in the future
- ❑ Trail is not part of State Trail System
- ❑ Proposed trail crosses private property
- ❑ Proposed golf course could adversely impact trail
- ❑ Do not have permission from WAPA or the property owner allowing public access

Recommendations:

- ❑ Work with landowners to secure public access
- ❑ Approved Town Council resolution for the Town of Oro Valley to accept responsibility for the liability and maintenance of the Oro Valley trail system
- ❑ Nominate trail to the State Trail System
- ❑ Construct the trail per trail design guidelines to accommodate shared-use.
- ❑ Coordinate with landowners/developers to secure public access.
- ❑ Address wildlife concerns
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James Kriegh Park
- ❑ Honeybee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment would follow the utility easement's dirt access road

Funding Sources:

- ❑ Developer
- ❑ Homeowners Association
- ❑ Utility Company
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #331 (would parallel Moore Road extension east of Rancho Vistoso Boulevard to Trail #180 and #156)

Problems:

- ❑ Locked gate at Rancho Vistoso Boulevard prevents public access
- ❑ Trail route is not clearly delineated
- ❑ Sections of the trail follow a utility access road that is badly eroded in places.
- ❑ Not part of State Trail System

Recommendations:

- ❑ Work with landowners to secure public access
- ❑ Delineate trail route with landowner
- ❑ Construct trail to eliminate erosion problems
- ❑ Add trail to the State Trail System

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail would more than likely follow utility access road

Funding Sources:

- ❑ Developer(s)
- ❑ Homeowners Association
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #322 (A dirt road linking Western Area Power Authority Line to the Rancho Vistoso Boulevard bridge at Big Wash.)

Problems:

- ❑ Future residential development is planned within the trail corridor
- ❑ Trail users may become disoriented because of lack of signing
- ❑ Trail is not on the State Trail System

Recommendations:

- ❑ Ensure trail is integrated with future development plans
- ❑ Integrate trail with Big Wash trail system prior to home construction
- ❑ Provide appropriate directional signs
- ❑ Add trail to the State Trail System

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail could follow either side of hardened drainage-way

Funding Sources:

- ❑ Developer(s)
- ❑ Homeowners Association
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ Developer
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

LOW OPPORTUNITY TRAILS

Low Opportunity Trails are trails controlled by many (four or more) private landowners and the property is an unlikely candidate for re-zoning. These trails are important segments of the Town's trail system.

Poppy Trail, #33 (Naranja Drive to Glover Road)

Problems:

- ❑ Trail crosses private property of several landowners and there is no provision for public access
- ❑ Proximity to La Cholla Blvd. may justify bringing the trail out to the road right-of-way
- ❑ Unclear about the wash corridor width to be protected (if any)
- ❑ Unclear about zoning status of properties

Recommendations:

- ❑ Work with landowners to secure public access
- ❑ Clarify trail alignment options
- ❑ Find out how much of the wash corridor will be protected and the zoning status of the affected parcels

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be field determined (may route to La Cholla right-of-way)

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Funds
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

East) Trail, #161 (Lucero Road to Lambert Lane via concrete drainage)

Problems:

- ❑ Trail crosses private property of many landowners and there is no provision for public access
- ❑ A short secondary trail off of the main loop, but it provides a connection from the Cañada del Oro Wash Trail to a proposed park

Recommendations:

- ❑ Work with landowners to secure public access
- ❑ Consider re-aligning trail to the west of the developed sub-division
- ❑ Find out if there is an easement for the concrete drainage-way and service road

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail could follow either side of hardened drainage-way

Funding Sources:

- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Western Area Power Authority Line Trail, #180 (Cañada del Oro Wash to Tangerine Road)

Problems:

- ❑ Trail crosses private property of many landowners and the utility easement makes no provision for public access
- ❑ Utility line ignores topographical considerations
- ❑ Trail not on the State Trail System

Recommendations:

- ❑ Work with landowners to secure public access
- ❑ Nominate trail to the State Trail System

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment would follow dirt access road

Funding Sources:

- ❑ Utility Company
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Western Area Power Authority (WAPA) Line Trail, #180 (2,500 feet of WAPA Line easement south of Moore Road)

Problems:

- ❑ Utility easement does not grant public access
- ❑ Trail not on the State Trail System

Recommendations:

- ❑ Work with Homeowners Association to secure public access
- ❑ Nominate trail to the State Trail System

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment would follow the utility easement's dirt access road.

Funding Sources:

- ❑ Utility Company
- ❑ Homeowners Association
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #329 and #330 (east of Naranja Town Site)

Problems:

- ❑ Trail crosses property controlled by the Monterra Hills HOA and there is no provision for public access
- ❑ Have not field-checked connection from Monterra Hills open space to the Naranja Town Site
- ❑ Two at-grade crossings with major roads required to link with CDO River Front Park
- ❑ Trail not on State Trail System

Recommendations:

- ❑ Work with the Monterra Hills HOA to secure public access
- ❑ Field check trail alignment
- ❑ Nominate trail to State Trail System.

Uses:

- ❑ Hiking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be field determined

Funding Sources:

- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #326 (Naranja Town Site north link to Tangerine Road)

Problems:

- ❑ Trail crosses property controlled by the Monterra Hills and Copper Creek Homeowners Associations (HOAs) and there is no provision for public access
- ❑ Have not field-checked connection from Monterra Hills and Copper Creek open space to the Naranja Town Site
- ❑ At-grade crossing with Tangerine road required to extend trail to the north
- ❑ Trail does not link with Town's trail system. Trail not on State Trail System

Recommendations:

- ❑ Work with the Monterra Hills and Copper Creek HOAs to secure public access.
- ❑ Field check trail alignment
- ❑ Find out if a below-grade crossing at Tangerine is possible
- ❑ Find linkages to the Town's trail system
- ❑ Nominate trail to State Trail System

Uses:

- ❑ Hiking, Equestrian

Public Access:

- ❑ Canyon Del Oro River Front Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be field determined

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

Trail, #327 (Rancho Vistoso wash trail, west of Woodburne Avenue)

Problems:

- ❑ Trail crosses Homeowner Association (HOA) property and there is no provision for public access
- ❑ Trail is shown on Rancho Vistoso PAD but has not been developed
- ❑ Trail is not linked to the Town's trail system
- ❑ Trail is not on State Trail System

Recommendations:

- ❑ Work with HOA to secure public access
- ❑ Construct the trail per trail design guidelines to accommodate shared-use trail recreation
- ❑ Link trail to the Town's trail system
- ❑ Nominate trail to the State Trail System
- ❑ Provide directional signing

Uses:

- ❑ Hiking, Biking, Equestrian

Public Access:

- ❑ Cañada del Oro Riverfront Park
- ❑ James D. Kriegh Park
- ❑ Honey Bee Canyon Trailhead

Trail Design Guidelines:

- ❑ See Trail Design Guidelines, Page 44-45
- ❑ Trail alignment to be determined by landowner

Funding Sources:

- ❑ Developer(s)
- ❑ Town of Oro Valley Capital Improvement Plan
- ❑ State Heritage Grant Program
- ❑ TEA-21
- ❑ Challenge Cost Share (National Park Service)

EASTERN PIMA COUNTY TRAILS

Important linkages to the Town's trail system are in the County's jurisdiction. We recommend that the County be consulted twice a year to learn what progress is being made to secure trails connecting to the Town's trail system.

IMPLEMENTATION METHODS

Oro Valley residents enjoy recreational access on private lands only when individual or corporate property owners make their lands available to the public. In urban areas, the closure of private lands diminishes close-to-home recreation opportunities for trail users.

Acquiring trail access on private land may involve the legal mechanisms of total conveyance; fee simple purchases, exchanges, donations, and condemnation proceedings, or partial conveyance; deed restrictions, easements, conservation easements, lease agreements, license agreements or a combination of these methods. In addition, trails may be protected through the subdivision or rezoning process.

Total Conveyance

Purchase — acquisition in fee simple is the most basic and complete ownership. Although expensive, it provides a high degree of permanent protection of a trail corridor. Acquiring land in fee simple is advisable for crucial trail segments, developed trailheads, and parking areas.

Exchange — exchanging land of equivalent appraised value with other government entities or private landowners. Once the exchange is accomplished, the trail is in fee simple ownership just as if it had been purchased.

Donation — citizens can either donate their property for the development of a trail or donate money to purchase land for a trail. The owner, by execution of a standard deed of conveyance (fee simple), gives the land to the public agency or nonprofit organization with no strings attached.

Condemnation — in order to condemn land for a trail, a condemnation action would have to be filed in court and the landowner paid the fair market value of that land.

Dedications — Cities in Arizona have been acquiring flood control rights-of-way of washes and streams for a number of years for low-intensity recreational uses such as bicycling, hiking and horseback riding. Most have been acquired as dedications in connection with subdivision and rezoning approval, through outright purchase, or as easements across private property. For example, Pima County law authorizes that wash floodways may be used for private and public recreational uses, including trails (Pima County Code, chapter 16.26.010c and Pima County Floodplain and Erosion Hazard Management Ordinances 1988-FC2).

Partial Conveyance

Deed Restrictions and Covenants — Deed restrictions are clauses placed in deeds restricting the future use of land in an agreed-upon manner. When property containing a trail is sold, donated, or willed, deed restrictions can prohibit uses or activities by the owners that would destroy damage or modify the trail. In lieu of purchasing lands and attaching restrictions to deeds, citizen groups or agencies may pay private property owners to attach trail covenants to their deeds. The covenants can bind the present owners and all future owners to maintain the trail in the condition it was in before being encumbered by the covenants. Once placed, covenants become deed restrictions.

Easements — An easement is the ability to use land for a specified purpose without owning the land through title. Examples of rights granted in easements include sewer and utility placement with maintenance and repair access, conservation restrictions, or recreation access. Negative easements restrain the owner from specific uses, while positive easements enable another party to use the land for special purposes. Gift, purchase, or condemnation may obtain easements. Easement agreements should set forth the rights of both parties, the specific uses covered in the agreement, the amount of land, a time limit, the cost, liability coverage, and preservation of any other rights about or within the property.

The rights-of-way for utility lines may offer important easement opportunities for trail access. Utility rights-of-way are usually easements acquired by a company for the purpose of constructing, operating, inspecting and repairing its lines and associated facilities. A trail access easement will require an additional grant from the underlying property owner or owners.

Conservation Easements — Conservation easements may provide tax incentives for individuals who provide easements on their lands for conservation, scenic, recreation, or preservation purposes. Because public access provisions are generally not included in the agreement, this strategy has largely been unused as a way to protect or create trail access. Since what is donated in a conservation easement is not the land itself, but certain rights on the land, such as scenic views, the owners remain free to sell or will their property and to keep private. Conservation easements should be considered whenever there is little or no need for public access. For example, a conservation easement could be purchased to protect and preserve scenic areas on either side of a trail corridor. Such negative easements are usually less costly than positive easements that permit use of the land.

Lease — A lease agreement allows the use of land for a fixed period of time in exchange for payment of a negotiated sum, such as \$1 per year. The incentive for a landowner to enter such an agreement is that the lease does not extend past the term of ownership and does not encumber the property to the extent an easement would. The town should seek a lease as long as the estimated life of the trail.

License — A license agreement is the landowner’s permission to use the property and is typically revocable at will. The terms vary based upon the needs and willingness of the landowners and the ability of the trail sponsors to negotiate good protection for the trail corridor.

Subdivision and Rezoning Process

Subdivision and rezoning regulations and procedures are usually adopted on a community-wide basis to direct and limit development. The Town of Oro Valley must approve detailed maps or plats before division of lots for sale or construction of buildings. For approval, plats must comply with zoning and special subdivision regulations pertaining to lot size and width, access roads, the suitability of land for subdivision purposes, drainage, and the adequacy of public facilities. Developers usually provide roads, sewers, drainage systems, and parks needed for subdivision residents.

At present, Oro Valley’s subdivision ordinances do not specifically mention trails. Given the rapid pace of development in Oro Valley, it is critical that trails be included in the early stages of development plans when trail linkages can most easily be accommodated.

Pima County has effectively secured trails through the subdivision or rezoning process. Pima County’s authority to request the provision of trails and trail related features through the development process comes through two main sources: the County’s board-adopted trails master plan, and several supporting ordinances that are located within the County code.

To help implement the Eastern Pima County Trail System Master Plan, Pima County added several trails-related ordinances to its county zoning (land use) code. These trail-related county ordinances include the following:

18.07.020 – Area, Screening and Setback Credits for Trail Access Dedications

This provision allows developers who provide trails across their projects to be credited for the square footage of the trail dedication. This helps avoid the creation of substandard lot sizes that do not meet zoning requirements and consequently cannot be used by the developer.

18.69.040 D3 – Subdivision Standards

This ordinance requires developers to “reserve” (i.e. provide via an easement or dedication) trail corridors listed on the Eastern Pima County Trail System Master Plan.

18.91.030 E2b – Rezoning Procedures

The rezoning ordinance requires that any trails affected by the subject project be “reserved” as a condition of rezoning.

In addition, Pima County’s zoning code requires that any site analysis documents prepared for a development project identify any master plan listed trails that cross the project, or affected public lands access points.

TRAIL FUNDING

Estimated Cost of Trail System

An accurate cost estimate for the Town's proposed trail system is difficult to determine because of many unknown variables.

The high-end of trail construction can be \$15,000 dollars a mile (bridges or other special construction features could add significant costs not factored into the \$15,000 dollar estimate).

One of the most economical ways to construct trails is through supervised volunteer labor. Volunteers can be used effectively to construct trails requiring minimal grading, stone and drainage work. Steep, rocky, and wet sites require the knowledge and expertise of a professional trail crew.

Funding Sources

Local funding sources should be identified first. These sources might include:

- The Town of Oro Valley
- Developers
- Home Owners Associations
- Businesses
- Non-Profits

Generating local funds can help leverage additional funding from county, state, federal, and private sources. Included in the appendix of this report is specific information for trail funding sources the Town of Oro Valley may be eligible for.

TRAIL MAINTENANCE

Town of Oro Valley

It is recommended that the Town of Oro Valley be responsible for the maintenance of the Town's trail system. An important first step is to identify what Town department will be responsible for the day-to-day trail maintenance needs. Another important Town role will be to ensure the construction of trails complies with the Town's trail guidelines. One purpose of adopting trail guidelines is to minimize future maintenance requirements.

Adopt-a-Trail Program

An adopt-a-trail program could be modeled after the Town's successful Oro Valley Adopt-of-Roadway Program. Unlike the adopt-a-road program, all age groups would be able to participate in the upkeep of the Town's trail system.

Arizona State Parks—Recreational Trails Program

The Town's trail system is eligible for Arizona State Park's Recreational Trail Program. Congress authorized the Recreational Trails Program (RTP) as part of the Intermodal Surface Transportation Efficiency Act for the 21st Century (TEA-21). The RTP portion develops and maintains recreational trails and trail facilities. FHWA provides RTP

(though Arizona State Parks) and requires recipients to match 20 percent of project, either in-kind or dollars.

All trail managing entities in the state are encouraged to submit their trail maintenance needs; projects are limited to routine trail maintenance on existing trails. Trail sponsors must certify availability of a 20 percent match, comply with the categorical exclusion that meets National Environmental Protection Act (NEPA) requirements, and submit requests by December 12, 2001.

Application forms are available online at
www.pr.state.az.us/partnerships/trails/statetrails.html

Trail Liability

In today's litigious society, private landowners and municipalities must concern themselves with the issue of liability. The fear of a lawsuit is often enough to prevent private landowners from opening their land to trail users although they would like to share their land with the public.

All states including Arizona have enacted laws that greatly limit both private and municipal landowner liabilities. On the private side, these laws are called Recreational Use Statutes. For public land, the governing law is usually the state's Government Immunity Act or Tort Claims Act. These laws are important for the future of trail users as they can shift the burden of responsibility to trail users and away from private landowners and municipalities.

See a copy of Arizona's Recreational Use Statute, Page 46

Trail Security

Personal safety for trail users is an important concern. Fortunately, crime-related incidents occurring on trails are very low.

Oro Valley's Chief of Police has expressed interest in organizing a mounted police patrol. In addition, police officers on bikes patrolling the trails on a regular basis would increase the safety of trail users.

Trailheads

Ideally, residents should be able to access the Town's trail system close to their homes, schools, parks and businesses.

In addition, trailheads accommodating public access to the Town's trail system should also be provided.

- At present, there are three existing public trailheads. They include the west end of Linda Vista Boulevard (across Oracle Road), James D. Kriegh Park and Cañada del Oro Riverfront Park.

Two additional trailheads are recommended. Vistoso Partners currently own the Honey Bee Canyon Trailhead. The Town of Oro Valley should obtain control of the Honey Bee Canyon Trailhead. Another trailhead should be constructed in Neighborhood 11 accommodating multi-use trail recreation.

Homeowners Associations (HOAs)

The Task Force has not talked directly with any of the Town's 75+ Homeowners Associations (HOA) about the Town's trail system. Listed below are HOAs having some control of segments of the trail system.

Privacy issues may be addressed with fencing, vegetative screening, or re-routing some sections of trail away from people's immediate view. To avoid the privacy issue altogether trails should be constructed before subdivisions are built, so individuals purchase their homes knowing the trail already exists.

Many neighborhoods have trails in the common areas of their developments. Neighborhoods should be encouraged and receive Town assistance to link neighborhood trails with the Town's trail system.

- Copper Creek HOA
- Coyote Ridge HOA
- Monterra Hills HOA
- Vistoso Community HOA
- Sun City Vistoso Community HOA
- Estates at Honey Bee Ridge HOA
- Vistoso Hills HOA
- Rancho Vistoso Community HOA

Trail Guidelines (These trail guidelines comply with Pima County.)

TOWN OF ORO VALLEY TRAIL SYSTEM, NON MOTORIZED SHARED USE

Trail Feature	Minimum Standard	Recommended	Maximum Standard	Comments
Corridor Width	25 feet	Width needed to preserve resources and maximize the trail user experience 12 feet	----	Terrain, view shed, development, wildlife habitat and other factors may increase or decrease width
Shared-Use (Tread Width)	10 feet		15 feet	Topography is presumed to have 10% or fewer slopes. Trail setting (urban vs. wilderness) may require adjusting tread width to protect important resources.
Single-Use (Tread Width)	2 feet	----	4 feet	----
Shared Roadway (Tread Width)	6 feet (hike/horse)	----	12 feet (hike/horse)	A shared roadway describes a trail where the travel lane may be used by bicyclist if space is not sufficient for a separate or adjoining shared-use trail to the road.
	5 feet (bike)		5 feet (bike)	
Hazard Plant Clearance	2' each side of tread. 10' high	----	----	Trail corridor should <i>NOT</i> be devoid of plants.
Tread Surface	----	Local native soil compacted to 95%.	----	Decomposed granite may be used in areas that have been graded, landscaped, or substantially altered from their setting.
Non-Mountain Trail Grade	8% or less. 8% grades should not exceed 200 linear ft.	5% or less	Not over 10 if @ 10 to 13%. Not over 30 if @ 8 to 10%	Grades should not exceed percentages indicated. Consult American Disabilities Act (ADA) for specific accessibility requirements.
Mountain Trail Grade	Not to exceed 10%	----	Not over 100 if @ 15%	Grades should not exceed percentages indicated.
Trail Cross Slope	2%	----	5%	----
Hillside Slope and Cut/Fill Ratio	2% < 10% 50%/50%	2% 0%/0%	Depends on acceptable	Slope 10% - 29% Cut/fill 50%/50%

Underpasses			height of cut and fill scar, and slide potential	<p>Slope 30% - 49% Cut/fill 75%/25%</p> <p>Slope > 50% Cut/fill 100%/0%</p>
		<p>The width of trail traveling through an underpass should not be less than 12 feet. The minimum vertical clearance is 9 feet at a distance from the centerline, and 11 feet at a distance of three feet from centerline. Natural or vandal-resistant lighting should be provided.</p>		
Curve Design Speed	8 mph	10 mph	15 mph	Curves under 8 mph require warning signs

ARIZONA LAW ON PRIVATE LANDOWNER LIABILITY

Section 1. Title 33, Arizona Revised Statutes, Chapter 12, Article 1, section 33-1551.
Amended by Laws 1993, Ch. 90, 25.

Chapter 12. Liabilities and Duties on Property Used for Education and Recreation

Article 1. General Provisions

33-1551. Duty of owner, lessee or occupant of premises to recreational users; liability; definitions

- A. A public or private owner, easement holder, lessee, or occupant of premises is not liable to a recreational or educational user except upon a showing that the owner, easement holder, lessee or occupant was guilty of willful, malicious, or grossly negligent conduct, which was a direct cause of the injury to the recreational or educational user.
- B. As used in this section:
1. “Educational User” means a person to whom permission has been granted or implied without the payment of an admission fee or other consideration to enter upon premises to participate in an educational program, including but not limited to, the viewing of historical, natural, archeological, or scientific sites.
 2. “Premises” means agricultural, range, open space, park, flood control, mining, forest or railroad lands, and any other similar lands, wherever located, which are available to a recreational or educational use, including but not limited to, paved or unpaved multi-use trails and special purpose roads or trails not open to automotive use by the public and any building improvement, fixture, water conveyance system, body of water, channel, canal or lateral, road, trail or structure on such lands.
 3. “Recreational User” means a person to whom permission has been granted or implied without the payment of an admission fee or other consideration to travel across or to enter upon premises to hunt, fish, trap, camp, hike, ride, exercise, swim, or engage in similar pursuits. The purchase of a state hunting, trapping, or fishing license is not the payment or an admission fee or other consideration as provided in this section.
- C. This section does not limit the liability which otherwise exists for maintaining an attractive nuisance, except with respect to dams, channels, canal and lateral ditches used for flood control, agricultural, industrial, metallurgical, or municipal purposes.

Oro Valley Trail System Annual Action Plan

The Oro Valley trail system requires a strong level of commitment, coordination and consistent action. We recommend the following Action Plan be implemented and revised annually as needed.

What	Who	When
Nominate entire trail system to the State Trails System.	Bike, Pedestrian & Trails Coordinator	3 rd
Secure a resolution from Town Council clarifying the Town's responsibility for liability and maintenance of the trail system.	Parks & Recreation	2 nd
Contact landowner for the Western Area Power Authority (WAPA) Line north of Tangerine Rd. to amend utility easement allowing public access.	Community Development	2 nd
Contact landowner for Big Wash trail system to prepare a recreation easement allowing public access on all trails identified on the revised 2001 Oro Valley Trail System Map.	Community Development	1 st
Contact landowner for Neighborhood 11 to identify a suitable trail alignment.	Community Development	1 st
Apply for Challenge Cost Share Grant to develop Trail System Sign and Interpretive Plan.	Bike, Pedestrian & Trails Coordinator	2 nd
Secure Honey Bee Trailhead for public access.	Town Council	3 rd
Appoint Citizen Trail Committee.	Town Council	2 nd
Hire Trails Coordinator.	Parks & Recreation	1 st
Meet with Chief of Police to develop a mounted police proposal.	Parks & Recreation	1 st
Add a trail page to the Town's web site.	Bike, Pedestrian & Trails Coordinator	1 st
Adopt recreation ordinances and subdivision codes supporting trails.	Town Council	4 th
Place equestrian/pedestrian signs approaching Cañada del Oro (CDO) Wash Trails on Overton Road.	Public Works	1 st
Contact Coronado National Forest about a trailhead at the end of Calle Concordia.	Bike, Pedestrian & Trails Coordinator	1 st
Contact Arizona Department of Transportation about equestrian friendly crossings at Oracle and Linda Vista and Calle Concordia.	Bike, Pedestrian & Trails Coordinator	1 st
Coordinate trail right-of-way projects with Oro Valley Public Works Department, Bike and Pedestrian and Multi-use Trail Plans.	Bike, Pedestrian & Trails Coordinator	Ongoing
Request Pima County Parks & Recreation Department for assistance with trail linkages outside Oro Valley.	Parks & Recreation	1 st
Organize an Adopt-A-Trail Program.	Bike, Pedestrian & Trails Coordinator	1 st
Identify trail linkages to Naranja Town Site.	Citizens Trail Committee	2 nd
Attend Arizona State Parks Grant Workshop.	Parks & Recreation	1 st
Identify landowners for all High Opportunity Trails.	Citizens Trail Committee	2 nd
Amend Parks, Open-Space and Trails (POST) Master Plan to reflect trail addition and deletions recommended in this report.	Parks & Recreation	2 nd
Meet with Homeowners Associations (HOAs) having segments of the trail system that crosses their property.	Bike, Pedestrian & Trails Coordinator	1 st
Update Oro Valley Trails Report	Bike, Pedestrian & Trails Coordinator	4 th