



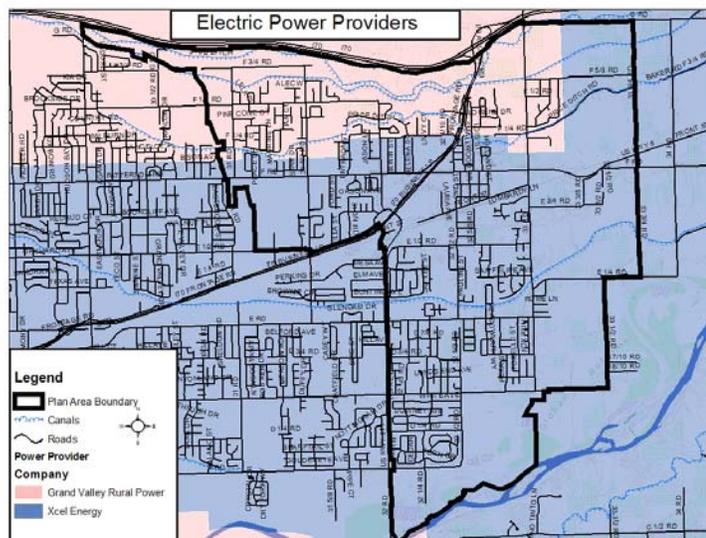
UTILITIES - SPECIAL DISTRICTS

Utility services in the area are provided as follows:

- Electricity - Grand Valley Rural Power Lines and Xcel Energy
- Natural Gas – Xcel Energy
- Telecommunications – Qwest, Bresnan, various other providers
- Domestic Water -, Clifton Water District and Ute Water Conservancy District
- Wastewater (Sewer) Collection and Treatment – Clifton Sanitation District; Eastern portions of the plan are currently not within a sanitation district.
- Solid Waste Disposal - Private haulers, Mesa County landfill
- Irrigation – Grand Valley Water Users Association, Grand Valley Irrigation Company, Palisade Irrigation District, Mesa County Irrigation District
- Drainage – Grand Junction Drainage District; 5-2-1 Authority

ELECTRICITY

Grand Valley Rural Power Lines (GVRP) provides electricity to the northern portion of the Community, generally north of F Road to 33 Road. Xcel Energy services the remainder of the area. There are not any current service issues in the area; however, GVRP has one 3-phase feeder in the middle of their service boundary area and would not be able to service a big industrial plant without significant upgrades.



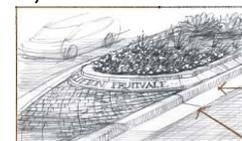
Source: Mesa County Department of Planning & Economic Development 2006

NATURAL GAS

Natural gas service is provided by Xcel Energy. There are no known service issues in the community.

TELECOMMUNICATIONS

Telecommunication services are provided by Qwest. Bresnan also provides cable and internet service in the area. There are no major issues of public concern in the planning area. When new development occurs Qwest is responsible to provide infrastructure to the site. The consumer then has a choice of service providers. Their one issue is that their service is often an afterthought for builders. Qwest would prefer to be notified up front when new developments are proposed to facilitate easier installation of infrastructure.





DOMESTIC WATER

Background

The general service boundaries of the Clifton Water District are as follows, the area between 30 Road and approximately 34 ½ Road bounded on the north by Interstate 70 and on the south by the Colorado River, selected properties on Orchard Mesa, and the Whitewater area. The funding mechanization of the Clifton Water District is monthly user fees and Plant Investment Fees (Tap Fees).

The Clifton Water District (CWD) produces and distributes potable water to residential and commercial customers within the entire Plan Area excepting that portion identified north of the US Government Highline Canal between 31 ½ Road and Lewis Wash which is served by the Ute Water Conservancy District by a dead-end 2" water line.

Typically, customer demand in the CWD is from 100 to 120 gallons per day per person. The water supply comes entirely from the Colorado River and the treatment facility is located just east of the Plan area. The water delivery system is principally gravity fed with an occasional pump or booster station.

The CWD is governed by a five-person Board of Directors, elected from qualified electors of the District at public election to serve terms of four years. The Board establishes policy of the District and employs the Manager who runs the day-to-day operations. CWD does not collect property taxes to fund its operation. 2006 represents the twenty second year that property taxes have not been collected to fund any portion of the operation. All operations of the District are funded from the fees collected for the services rendered.

The CWD was formed in 1951 serving 351 active taps and produced 95,000 gallons of water per day. Today the District serves 10,000 active taps and produces up to 8 million gallons of water per day with a steady population growth rate of 3% annually. In 2007, the Clifton Water District will complete a treatment plant expansion project that will increase the treatment capacity to 11 million gallons per day (MGD) and provide for expansion to 16 MGD. In 2004 the District added 3.9 MG of finished water storage capacity and in 1997 began using membrane technology, nanofiltration and reverse osmosis in the treatment process. CWD has over 150 miles of pipeline, three (3) pumping stations and 9 Million Gallons of finished water storage.

The Clifton Water District has an Agreement to provide the City of Grand Junction 4.5 MGD of water. This was the result of prior agreements by which the City provided Clifton water rights in the Colorado River and paid for a portion of the Clifton Water Treatment Plant. In prior years, the City received this water on a routine basis however, in recent years; the 4.5 MGD has only been needed in times of emergency.





Both water providers have adequate supply capacity to serve the planning area as it develops to its build-out potential. The small Ute Water service area on the northwest fringe of the plan area is currently served by a 2 inch deadend line and will require upgrades to accommodate any growth. Any water line upgrades would need to connect to Ute’s 8" main in 30 Road or cross Interstate 70 and connect to Ute’s 36" main line north of the interstate. According to Ute Water officials the more likely scenario would be the inclusion of this area into the Clifton Water District service area and subsequent service by Clifton Water, since CWD has the infrastructure much closer than Ute Water does to serve this area.

Because of the Grand Valley’s desert environment, waterwise techniques (also known as the registered name “xeriscaping”) and the use of xeric (low water use) plants works very well. The Clifton Water District plans to continue to encourage ‘infill’ development within the Plan Area and to continue infrastructure upgrades as indicated by growth rates and trends.

Key Issues Identified by CWD

- Sizing new infrastructure to meet current and future growth projections;
- Coordinating main line upgrade projects with other entities such as Mesa County, Clifton Sanitation #2 District, Colorado Department of Transportation;
- Working with Mesa County Engineering Department to assure an access corridor along the 33 ¾ Road alignment for future installation of a new transmission line from the District’s water treatment plant to the storage tanks north of Interstate 70;
- Maintaining the District’s Board of Director’s operating philosophy to “pay as you go” and adjust water rates to production and delivery operational costs without imposing mill levies on the District’s customer base.

7 Basic Principles To Good Xeriscape Designs

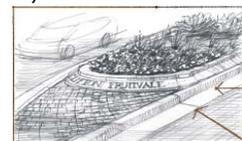
1. **Comprehensive planning and design for low water use;**
2. **Creating practical turf areas,**
3. **Selecting low water plants and organizing plants by water usage;**
4. **Using adequate soil preparation;**
5. **Using water conserving mulches;**
6. **Irrigating efficiently; and**
7. **Maintaining landscaping appropriately”.**

(Source: Denver Water Board)

WASTEWATER – SEWER – COLLECTION AND TREATMENT

Background

Historically, sewage collection and treatment in the Clifton-Fruitvale area has been provided by Clifton Sanitation District #1 and Clifton Sanitation District #2 (CSD #1 and CSD #2). These quasi-municipal corporations or districts are organized under State of Colorado Special District Act.





Consolidation of the two districts occurred in 2006. A single new state of the art mechanical plant will start construction in the fall of 2006 with completion scheduled for the end of 2008. Until such time as the new mechanical plant is operating, the current lagoon systems will be used to treat domestic sewage. The three lagoon systems have been consolidated into one system and the remaining two systems are being decommissioned and reclaimed at this time.

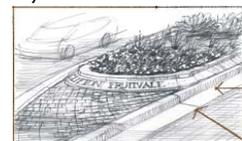
The eastern part of the Community is not presently within the Sanitation District boundaries. With the construction of the new plant CSD has projected the capacity to treat new development in the area currently outside of the district at an average density of 4 dwelling unit per acre,

A five member board of directors governs the District that currently employees four people. The District's boundaries encompasses an area of approximately 2,855 acres, that generally includes the area from 31 Road on the west to 33 ¼ Road on the east, and from the Highline Canal on the north to the Colorado River on the south. The District's current population is approximately 18,000.

The operation and treatment of sewage treatment facilities are regulated by State statutes and regulations administered by the Colorado Department of Public Health and Environment's Water Quality Control Division. Sewer line sizes are upgraded as development occurs, with improvements paid for by the developer.

Only a small number of the existing homes in the planning area are not currently being served by sanitary sewer. Most of these homes are in the eastern portion of the planning area and are not currently within the CSD service boundaries. These homes are served by onsite individual sewage disposal systems, regulated by Mesa County Division of Environmental Health. Failing systems are required to connect to the public sewer system if available within 400 feet of the system, unless CSD is unable to provide service.

The majority of the public comments in the planning process support CSD providing sewer service to the area between the buffer zone and the current CSD east boundary. People are also very interested in the decommissioning of the lagoon systems and potential for a riverfront trail and community open space/park system on the river.





According to CSD, all wastewater flows in the area may be accepted by CSD for treatment provided that such acceptance does not exceed throughput or design capacity of the treatment works or constitute a substantial impact to the functioning of the treatment works, quality of the receiving waters, human health, or the environment. CSD has a responsibility to protect the Domestic Wastewater Treatment Works as defined by federal regulations from pollutants which would cause pass through or interference or otherwise be incompatible with operation of the treatment works including interference with the use or disposal of municipal sludge. Clifton Sanitation currently does not have an EPA approved pretreatment program that would allow for certain Categorical Industries to be served by the District. Anyone anticipating development should contact CSD first to make sure the system can handle their needs.

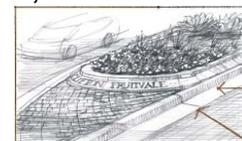
Sanitary Sewer Key Issues and Public Comments

- Coordination of utility and road projects
- CSD has an interceptor to service the area north of the Highline Canal, intended to serve development between the Highline Canal and Interstate 70, and potentially areas north of Interstate 70 (CSD#1 extension in the mid 1990s).
- Service area expansion process - Expansion of a special district's service area is subject to review and approval by District Court. While the County cannot veto such expansions, it can provide comments to the District Court on changes to a service plan. The CSD considers itself to be exempt from District Court review of its boundaries.
- Potential impacts to the buffer area if CSD eventually provides sewage treatment services for the Town of Palisade, as this would require a sewer line to be constructed through the Palisade buffer. Need assurance sewer service would not be provided to buffer properties.
- Mesa County has asked CSD to enter an intergovernmental agreement related to expansion process – e.g., agree not to expand into Palisade buffer, notify MC of expansion requests, etc.
- Reclamation plans for the decommissioned lagoons – consider uses such as recreation, floodplain and riparian conservation, and future trail connections.

SOLID WASTE DISPOSAL

Background

Mesa County owns and operates a landfill which serves the majority of Mesa County residents. A Solid Waste Management Plan was adopted by Mesa County in July, 1994. A primary conclusion of the Plan is that "The landfill has considerable remaining disposal capacity and offers a low-cost, environmentally secure solution to solid waste management". Assuming the present waste stream growth rate of 3% annually, the currently permitted area of the landfill can be expected to last until approximately 2035.





Solid waste is collected from businesses and residents within the urban areas and in some rural areas. Private residential collection service is available in the Clifton-Fruitvale Community, but is not required by law. State law does not allow Counties to franchise garbage hauling areas in unincorporated areas, nor require trash pick-up services.

Waste Reduction: The 1994 Plan identifies a number of techniques for reducing the amount of waste which is disposed of in the landfill. The County is in the process of initiating some of these techniques, primarily by working with the private sector to encourage recycling activities. The County is also working toward providing drop-off recycling at the transfer stations. Transfer stations do require staffing or they can turn into mini garbage dumps. Someone has to be there to educate and regulate the public. The economics suggest at least \$30,000 for staffing, with additional costs to build, operate and maintain the facility.

Mesa County has initiated a green waste composting program, biosolids and animal mortality composting program, hazardous waste collection program and an intensive public education program. Generally, the landfill's relatively low fees serve as a major deterrent or disincentive to recycling efforts.

The landfill also has the free day campaign that is offered to the public – typically in the spring.

Solid Waste Key Issues and Public Comments

- Lack of mandatory trash collection in the Community. State law does not allow County's neither to require collection services nor to franchise garbage hauling areas in unincorporated areas.
- Improve and use alleys in area south of F Road for trash pick-up – instead of trash pick-up in front of the houses.

IRRIGATION

Irrigation water is provided to the planning area by Grand Valley Water Users Association (Government Highline Canal), Grand Valley Irrigation Company, Palisade Irrigation District, and Mesa County Irrigation District. Each of these providers was originally organized to serve the farming community and have to adapt to the urbanization of the community over time. Water is diverted from the Colorado River and conveyed via canals to various lateral ditches (most of which are not under the control of the irrigation companies) that serve individual properties.

Grand Valley Irrigation Company (GVIC)

- County needs to honor review agency comments for new development.
- Concerned with keeping the public off of the area along the canals so as not to interfere with irrigation operations.
- Retention, detention and drainage are the main issues.





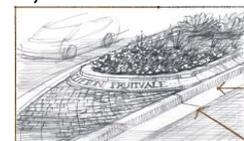
- Problems are fewer when the County requires developers to put in adequate irrigation systems preferably with a storage facility and single pump for the development under control of the home owner's association.
- GVIC accepts stormwater drainage into their system through a discharge permit from the State.

Mesa County Irrigation District (MCID)

- MCID water is adjudicated to the land (the water goes with the land).
- Land buyers usually aren't aware of the amount of water entitled to the land.
- Subdivision homeowners tend to want to water at the same time, and assume lack of adequate water is MCID's problem.
- Need to work more through the developers so the system the property owner installs is compatible with the amount of water available.
- MCID canals are often dry by 30 Road due to overuse by upstream irrigators.
- Designed systems often are not installed the way it's originally engineered.
- Water is relatively cheap. The average home is \$20/year but it doesn't give them very much water. The value of irrigation water is great. People don't believe them when they tell them they've used all the water they were allowed for a year in about 3 days.

Grand Valley Water Users Association (GVWUA)

- The federal government owns metes and bounds on the canal properties.
- Grand Valley Water Users is responsible for costs, operations, maintenance, etc.
- GVWUA is opposed to recreation on the canal banks.
- GVWUA provides water to the MCID's Stubb ditch and the Palisade Irrigation District's Price Ditch.
- The canal was reconstructed in 1992-94 with a liner so it's in good shape, but need to keep cattails down and weeds from growing.
- Although GVWUA has a State Water Quality storm water management permit GVWU will not take illicit storm water discharges in their canal, such as generated from subdivisions.
- A lot of garbage is dumped in the canal including tires and grass clippings.
- Need to protect water rights and easements to deliver the water.
- Concerns that some surveys for new developments do not include recorded and apparent easements on the plat.
- GVWUA cannot move ditches or pipelines without owner's permission.
- Need to promote wise use of water.
- Need to ensure irrigation water is used (where available) and not domestic water for irrigation purposes.
- Irrigation companies would like to collect a review fee for their review of development plans which would allow them to employ people with expertise to review these plans.
- The current GVWUA user fee is \$3.70/acre foot for water.





Irrigation Key Issues and Public Comments

- Irrigation and drainage plan requirements for new developments.
- Lack of enforcement of irrigation system standards for new development
- Developers need to do a better job of protecting irrigation infrastructure and delivery systems to new subdivisions. Need to protect irrigation water.
- Lack of ditch maintenance.
- Incorporation of linear waterways in the design of new developments. Allow and encourage new developments to incorporate drainages and other waterways (irrigations and tailwater ditches, etc.) as natural amenities for the lots.
- Irrigation water management plans
- Illegal dumping in and along irrigation facilities
- Lack of adequate irrigation water for a lot of new residential development.
- Over-use of irrigation water. Lack of education and coordination on how much irrigation water is allocated to each user.
- Need comprehensive utility infrastructure inventory and mapping.
- Open irrigation ditches – maintenance issues – dangerous
- All development (even high density) should be required to provide irrigation water to homes to water yards
- Weeds along irrigation canals and ditches.

DRAINAGE

See also Natural Resources – Environment chapter

The Grand Junction Drainage District (GJDD) operates a system of drainage ditches throughout the area. The current system is inadequate and is getting worse with urbanization. There are not many facilities to collect and transmit storm water. GJDD is upsizing pipes on 32 ½ and E Roads. “Downtown Clifton” has one small drainage line in disrepair. Trash is also an issue in drainage ditches. The new storm water drainage regulations coming through the County are being coordinated by the 5-2-1 Drainage Authority (Fruita, Grand Junction, Palisade, Mesa County and the GJ Drainage District). GJDD is trying to keep ahead of new development with over-sizing facilities.

Drainage Key Issues and Public Comments

- Lack of adequate stormwater drainage facilities to handle urban development
- Blocking of historic drainages
- BLM site south of I-70 at 32 Rd alignments is managed by the US Bureau of Reclamation and may be a good drainage detention site.
- Intersection of 32 5/8 and E ½ Road has drainage problems.
- Topography, natural drainage and native vegetation should be respected in new developments.

