

Chapter 9: NATURAL RESOURCES

Discussion

Chubbuck has relatively few natural resources: no minerals, no forests, and no fisheries. The few resources in its possession are important: land, water, and air. Protecting the groundwater has become increasingly important, and non-attainment status for particulate matter in the air poses challenges of its own. Chubbuck also contains and is bordered by some of the best farmland in Bannock County.

Safeguarding the Portneuf River and the Snake River Plain aquifers will become increasingly important as land development continues and the population grows. To ensure a clean, safe and abundant supply of high quality water, adequate protection measures for identified significant streams, riparian corridors, wetlands, aquifer recharge areas, and municipal and private wells is required. Regulations that protect and enhance these areas must strike a balance between reasonable economic use of property and the resource protection. Protection measures will benefit the entire community by improving water quality, maintaining and restoring fish and wildlife habitat, minimizing flood damage, preserving native plant communities, minimizing stream bank erosion, and conserving scenic, recreational, and educational values of natural resource areas.

Regional Planning

Maintaining and improving the air quality in the Portneuf Valley is an important part of keeping the valley a desirable place to live. The forecast of population and economic growth increases concerns about the Portneuf Valley's ability to maintain compliance with air-quality standards. The Air Pollution Control Rules of the Idaho Administrative Procedures Act define air quality as the specific measurement in the ambient air of a particular air pollutant at any given time. Ambient pollutants include PM₁₀, lead, sulfur oxides, nitrogen dioxide (NO₂), ozone (O₃), carbon dioxide (CO₂), and PM_{2.5}. In 1993 and 1999, PM₁₀ emission in the Portneuf Valley exceeded the annual and hourly maximums, which resulted in classification of the valley as a non-attainment area. A variety of materials, such as wind-blown dust, field and slash burning, wood stove smoke, and road cinders used for winter sanding, can produce fine particles that fall into the PM₁₀ air pollution category. Automobile exhaust and other incomplete combustion sources of carbon monoxide (CO) are also a concern for the Valley. As vehicle miles traveled (VMT) increases with population growth, the amount of PM_{2.5}, O₃, and CO emissions will rise. Because the Portneuf Valley has a complicated airflow pattern and is heavily reliant on weather conditions, it is critical that these sources of air pollution are considered when planning for future growth.

Relevant Vision Statement Component

In the year 2020: Air quality in the Portneuf River Valley has been improved by citizens working with industries to reduce emissions. Air quality also has been achieved by reducing reliance on automobiles and reducing the number of daily vehicle miles traveled by residents. This has been accomplished through a better mix of land uses, a more connected street network, and more people using alternative modes of transportation, including buses and shuttles. The Portneuf River Valley also has improved its water quality by protecting water resources and wetlands, and working to clean up sites that contribute to water pollution.

Growth in the Portneuf River Valley has been managed to take advantage of existing infrastructure and to protect open space and farmland surrounding the urban area. Urban service boundaries and agricultural zoning have helped preserve and protect farms northeast of Chubbuck and along the Portneuf River. A few hillside areas have been carefully developed, but the steepest areas have been retained and protected as open space and for the spectacular views they provide the region's residents.

Natural Resources Mission Statement

Protect and enhance local natural resources for present and future generations.

Goal 1: Protect our natural resources, preserve them, and promote their balanced utilization.

Chubbuck Vision Element

1. Pride in ability to protect;
2. A clean and secure city;
3. Sensible to keep water and air clean;
4. Community values for a clean environment.

Issues addressed

1. Economic development by assuring protected supply of air and water
2. Land use by suggesting balance of development and open spaces
3. Aesthetics

Objective 1.1

Improve our understanding of natural systems.

Policy:

- a. Encourage cooperative management of natural resources among appropriate agencies through the development of common policies and public education materials.
- b. Participate in relevant Idaho State University and IDEQ environmental studies.

Goal 2: Protect groundwater and surface water from pollution.

Objective 2.1

Maintain water quality and protect aquifer recharge areas, wetlands, streams, rivers, and lakes.

Policy:

- a. Identify aquifer recharge areas and protect them by including them in a network of public and private open space.
- b. Protect the surface waters from siltation and erosion due to excess runoff and/or surface and subsurface pollutants.
- c. Establish a wellhead protection program that prohibits endangering land uses around private and public wellheads and recharge areas.
- d. Provide riparian vegetation and vegetative buffers along stream banks, waterways, and adjacent to wetlands. Typically, buffers shall be at least 50 feet wide.
- e. Develop and implement a wellhead protection program that protects municipal wells from potentially damaging land uses.
- f. Assure that new development manages storm water runoff and minimizes the impact of flooding downstream.

Strategy:

- a. Use a water resources overlay zone to protect water resources.

Objective 2.2

Conserve water.

Policy:

- a. Educate the public about water conservation measures including xeriscaping, the use drought tolerant landscaping.

- b. Develop water conservation measures and regulations including voluntary or mandatory irrigation limits.

Goal 3: Protect air from pollution.

Objective 3.1

Help citizens reduce their reliance on the automobile and the number of daily vehicle miles traveled.

Policy:

- a. Require new streets to connect with other streets.
- b. Require the consideration of transit access in subdivision review.
- c. Require the inclusion of bicycle and pedestrian systems during subdivision review and development to support alternative modes of transportation.
- d. Provide a mix of land uses, a more-connected street network, and alternative modes of transportation, including buses and shuttles.
- e. Establish a policy of phased service extensions to encourage development densities that are required to support public transit (**See Urban Service Boundary Map**).

Objective 3.2

Support efforts to work with industries to reduce emissions.

Policy:

- a. Evaluate impacts of prospective businesses on natural resources.

Objective 3.3

Work with citizens to reduce emission of particulate matter from construction and wood-burning stoves.

Policy:

- a. Enforce regulations controlling dust during construction projects.
- b. Continually monitor and update road maintenance practices and construction standards in order to reduce fugitive dust.
- c. Maintain and update regulations relating to installation and use of wood burning devices.
- d. Require paving of parking lots.

Goal 4: Minimize the impact of new development on natural features.

Objective 4.1

Protect and enhance designated significant streams, riparian areas, and wetlands and associated buffers within the city limits.

Policy:

- a. Identify and protect significant water resource features.

Strategy:

- a. Use the water resource overlay to protect identified significant water resource features.

Objective 4.2

Protect and maintain critical wildlife habitat, significant natural features, and other sensitive lands within the City.

Policies:

- a. Identify and protect sensitive lands within the City.

- b. Maintain riparian vegetation along streams, wetlands, and water bodies to benefit wildlife.

Strategy:

- a. Use the sensitive lands overlay to protect identified areas.

Objective 4.3

Protect steep slopes from erosion and destruction during development.

Policy:

- a. Prevent and/or mitigate hillside damage during development.
- b. Manage hillside development to benefit slope stability, storm drainage management, wild-fire protection, and aesthetics.

Goal 5: Preserve farmland within the region.

Objective 5.1

Preserve prime farmland for productive agricultural use for as long as is practical.

Policy:

- a. Work with Bannock County and the Soil Conservation Service to identify areas of prime farm land in and surrounding the city.
- b. Work with other jurisdictions and agencies to preserve farmland within the City, within the USB, and in adjoining areas of Bannock County.
- c. Discourage conversion of farmland to non-farm uses outside the USB.
- d. Work with Bannock County to assure that prime farmland is appropriately zoned and protected against premature subdivision.
- e. Judiciously use zoning to protect agricultural and mineral resource lands.
- f. Within agricultural zoning districts, limit residential densities to an average density of no more than one dwelling per 40 acres. For new rural development within agricultural districts, use lot-size averaging to cluster development on small lots while maintaining large parcels for agricultural use.

Goal 6: Preserve and protect open space.

Objective 6.1

Protect open spaces such as steep slopes, floodplains, drainage ways, wetlands, and critical wildlife habitat from development through a combination of regulatory programs, development incentives, and acquisition programs.

Policy:

- a. Land purchase and the acquisition of open space or conservation easements shall be encouraged to protect open space.

Goal 7: Conserve energy.

Objective 7.1

Explore the opportunities to use city projects to showcase advances in solar, wind, other alternative energy sources, and energy conservation measures.

Policy:

- a. Use geothermal resources to the advantage of the community.