Air, Water, and Land Resources Quality

Introduction

Oregon's Statewide Planning Goal 6 requires efforts to maintain and improve the quality of air, water, and land resources of the state. Goal 6 states that: "*All waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules and standards. With respect to the air, water and land resources of the applicable air sheds and river basins described or included in state environmental quality statutes, rules, standards and implementation plans, such discharges shall not (1) exceed the carrying capacity of such resources, considering long range needs; (2) degrade such resources; or (3) threaten the availability of such resources".*

This goal is mainly accomplished by local compliance with state and federal regulations. A variety of state agencies administer resource quality protection programs and maintains databases about resource quality. The lead agency for such efforts in Oregon is the Oregon Department of Environmental Quality (DEQ).

The purpose of this section is to summarize existing information and regulations regarding air, water, and land impacts in Monmouth. Where applicable, this section includes agency database information regarding permits in the Monmouth area.

Air Quality

Ambient air quality is monitored by the Oregon Department of Environmental Quality (DEQ) by a statewide air quality surveillance network. Ambient air quality is related to the amount and types of discharged pollutants and meteorological events. Air Pollution Index (API) values, based on the monitoring information, and are calculated for Portland, Salem, Eugene, Medford, and Bend. The monitoring stations closest to Monmouth are located in Salem. These stations continuously monitor for carbon monoxide, ozone, sulfur dioxide, and nitrogen dioxide and particulate levels. Lead samples have also been obtained in Salem.

The air pollutants of greatest concern in Oregon are:

- ground-level ozone, commonly known as smog
- fine particulate matter (mostly from wood smoke, other combustion sources, cars and dust) known as PM2.5 (2.5 micrometers and smaller diameter)
- hazardous air pollutants (also called Air Toxics)

The *2008 Oregon Air Quality Annual Report* produced by DEQ shows that Salem had 327 days rated as Good for air quality and 32 days rated as Moderate. Six (6) days were rated as "unhealthy for sensitive groups" such as people with heart disease, respiratory disease (such as asthma), older adults, and children. No days were rated "Unhealthy".

Air pollution permits include Air Contaminant Discharge Permits and Oregon Title V Operating Permits, and are dependent on:

- The type of facility proposed
- The amount of emissions
- The type of emissions

- Regional air quality e.g. is the area in "attainment" of existing air quality standards (DEQ, 1996).

Activities that typically require a permit include asphalt plants, incinerators, grain elevators, rock crushers, boilers, and other major sources of air pollution. In general, facilities that emit more than 10 ton of pollutants per year require a permit and facilities that emit more than 100 ton of pollutants per year require a permit and must meet standards that are more stringent. DEQ should be contacted for more information and assistance regarding air contaminant discharge permits.

In 2008, the Environmental Quality Commission approved Greenhouse Gas (GHG) mandatory reporting rules. The rules are needed to gain a better understanding of the sources of greenhouse gas emissions in Oregon, and to track progress toward meeting GHG emission reduction goals.

Beginning in 2009, some types of permitted facilities must report emissions for the calendar year These include uses permitted by Oregon Title V Operating Permits and some uses permitted by Air Contaminant Discharge Permits. The facilities required to report must emit 2,500 metric tons of combined greenhouse gases measured as CO2 equivalents (mtCO2e) per year.

The DEQ maintains a database of Air Contaminant Discharge Permits. Facilities that emit over certain levels of particulates, carbon monoxides, nitrogen oxides, sulfur dioxide, or volatile organic compounds are required to obtain a discharge permit. The DEQ database does not list any Air Contaminant Discharge Permits in Monmouth.

Other local air quality concerns can include asbestos; outdoor burning, dust and fugitive emissions, chlorofluorocarbons, and wood stove pollution. These activities are regulated as follows:

- Demolition, renovation, repair, construction, or maintenance activities that involve material containing asbestos are regulated by DEQ.
- Construction of large parking lots (150 to >1000 spaces) in certain areas of the state requires a permit.
- Most western Oregon counties (including Polk County) require that certain activities take precautions to prevent particulate matter (dust and fugitive emissions) from becoming airborne. Construction and renovation activities, equipment operation, and materials handling are examples of potentially affected activities.
- DEQ, and other state agencies, regulate all types of outdoor burning (e.g. backyard incinerators, construction debris, and field burning) some local governments have added additional restrictions by local ordinances.
- Controlling wood smoke pollution from wood stoves may be mandatory or voluntary, depending on regional air quality.
- The service, maintenance, repair, installation, and disposal of air conditioners and refrigerators are strictly regulated. The chlorofluorocarbons used in these units interact with the atmosphere, create smog, and damage the ozone layer.

Air toxics are generally defined as air pollutants known or suspected to cause serious health problems. Serious health effects include cancer, birth defects, lung damage, and nerve damage. The U.S. Environmental Protection Agency (EPA) has recently released the first of two phases of the National Air Toxics Assessment (NATA), a new evaluation of 32 high priority toxic air pollutants. The first phase of NATA includes estimated air toxics emissions and outdoor concentrations. The second phase will provide estimates of exposure and health risk. In the Willamette Valley, there are concentrations of 12 toxic air pollutants estimated to exceed health-based benchmarks, or guidelines for safe levels. These pollutants are acetaldehyde, acrolein, benzene, beryllium, 1,3butadiene, carbon tetrachloride, chloroform, chromium, 1, 3 dichloropropene, ethylenedibromide, ethylene dichloride and formaldehyde. Five of

those air pollutants are present in concentrations estimated at ten times or more above benchmarks. Major sources are large industrial facilities, like wood products manufacturers and steel mills. Area sources include smaller manufacturers and service industries, such as auto body shops and service stations, and consumer activities. On-road mobile sources are cars and trucks. Non-road mobile sources include motorized watercraft, farm equipment, and all terrain vehicles.

Because motor vehicles emit the most air toxics, people can help by driving less (reducing trips using public transportation, carpooling and telecommuting). Using alternatives to gas powered equipment, such as electric lawnmowers and weed trimmers will also reduce air toxics. As consumers, we can choose products that emit fewer volatile organic compounds, which are usually air toxics as well. Many paints and other products are now available in low toxicity formulations. Other ways of reducing air toxics include reducing woodstove use, doing regular vehicle maintenance and avoiding household pesticide use.

Air quality in the Willamette Valley is affected by all activities occurring in the airshed. The metropolitan areas influence air quality in the rural areas and vice versa. While large point sources are most often associated with air quality problems it is important not to underestimate the cumulative impact of individuals operating small engines, driving vehicles, and backyard burning. To reduce pollutants related to burning, Monmouth enacted a citywide ban on outdoor burning in 2010.

Water Quality

Information about surface and groundwater quality in the Monmouth area was obtained from the DEQ, Oregon Health Division (OHD), and other background reports. This information is compiled from monitoring programs run by state agencies to comply with water quality standards set by the U.S. Environmental Protection Agency. Water quality investigations have been undertaken for the Willamette Basin by the United State Geological Survey for surface water and groundwater.

Surface Water Quality

The Clean Water Act (CWA) requires that states publish a list of surface water bodies that fail to meet water quality standards. Water bodies that do not meet water quality standards are assessed as Water Quality Limited and are assigned to categories depending on the type of pollutant(s) present and the plans for restoring the water quality. The Section 303(d) list includes waters where pollutant Total Maximum Daily Loads (TMDLs) need to be developed. Plans to improve water quality must be developed when a water body is placed on the 303(d) list.

Every two years, DEQ assesses water quality and reports to Environmental Protection Agency (EPA) on the condition of Oregon's waters. DEQ completed Oregon's 2004/2006 Integrated report in May 2006. Oregon's 2004/2006 303(d) list was reviewed and approved by EPA in February 2007. DEQ is currently working on Oregon's 2010 Integrated Report, which will update Oregon's 303(d) list of water quality limited waters needing TMDLs. The report is due to be submitted to EPA in late 2010.

Ash Creek is not included in the Section 303(d) list. The South Fork of Ash Creek is listed on the DEQ Water Quality Assessment Database as attaining water quality standards. The North Fork of Ash Creek is listed by DEQ as "water quality limited not needing a TMDL". The listing is based on stream flows and habitat modification. Low stream flow is not considered a pollutant. Habitat modification can include modifications produced by increased stormflows (siltation, bank destabilization, etc.) and out-of-stream habitat alterations (riparian vegetation removal, bank alteration, etc.), and stream encroachments (dams, enclosures, bridges, etc.). Because flow and habitat are not considered pollutants under the Clean Water Act, the North Fork of Ash Creek is not included in the 303(d) List. In Monmouth, most of the North

Fork of Ash Creek extends across areas that are undeveloped, extending approximately 5,500 feet from 16th Street northward to Hoffman Road. Most of this area is located in the Urban Growth Boundary, but outside the City Limits.

The Oregon DEQ administers the water quality permit process. National Pollutant Discharge Elimination System (NPDES) permits regulate discharges to surface waters from commercial or industrial facilities, municipal sewage treatment plants, confined animal feeding operations with point source discharges, and mining operations. Water Pollution Control Facility (WPCF) permits regulate discharges of waste waters land to the land surface or subsurface with no direct discharge to surface waters. Examples include land irrigation, evapotranspiration lagoons, industrial seepage pits, and subsurface sewage disposal systems with flows greater than 2,500 gallons per day.

Stormwater runoff from land and impervious areas such as paved streets, parking lots, and building rooftops during rainfall and snow events often contain pollutants that could adversely affect water quality. National Pollutant Discharge Elimination System (NPDES) permits are required for storm water discharges to surface waters from construction and industrial activities and municipalities if stormwater from rain or snow melt leaves a site through a "point source" and reaches surface waters either directly or through storm drainage. A point source is a natural or human-made conveyance of water through such things as pipes, culverts, ditches, catch basins, or any other type of channel.

Construction or development activities requiring an NPDES 1200-C stormwater general permit include clearing, grading, and excavation operations that disturb one acre or more of land.

Based on federal regulations, NPDES permits coverage is required for industrial facilities that discharge stormwater from their industrial areas to surface waters of the state, or to storm drains that discharge to surface waters.

Municipal sources that need to obtain permits are classified as either "Phase I" or "Phase II" municipal separate storm sewer systems (MS4s). Phase I MS4s are those with populations greater than 100,000, while regulated Phase II (or "small") MS4s are those municipalities with populations less than 100,000 located within Census Bureau-defined Urbanized Areas.

The City of Monmouth owns and operates its own wastewater collection and treatment system. The collection system transports sanitary sewage to the wastewater treatment plant located in the northeast part of the city. After treatment, the wastewater effluent is discharged to the Willamette River via gravity pipeline shared with the City of Independence. Treated effluent is discharged into the Willamette River during the wet season. The city's National Pollutant Discharge Elimination System (NPDES) Permit only allows effluent discharge from November 1 to May 31. During the dry-weather months, effluent is applied to an effluent re-use site consisting of 164 acres of trees. Evaporation also provides for some effluent disposal during summer months. Additional information regarding the City's wastewater treatment system is found in the Public Facilities Element of the Comprehensive Plan.

Groundwater Quality

Monmouth relies exclusively on groundwater for municipal water supply. Drinking water is provided by three city wells. The city's future water supplies will be derived primarily from Marion County Well #1 and a second well in Marion County (Marion County #2) that serves as a supplementary and backup source to Marion County Well #1. Marion County Well #2 began operating in 2009. The City of Monmouth is also pursuing the development of a shallow well field on the west side of the Willamette River. This project is a joint developmental project with the City of Independence referred to as the Willamette River Well Field.

The city currently has access to four (4) wells from two (3) well fields: the Marion County Well #1, located at the approach ramp at the east end of the Willamette River (Independence) Bridge, Marion County Well #2, located south of Well #1 on Riverside Road, and the Independence Fourth Street well field. The Marion County well is an 1100-1200 GPM production source. The Independence Fourth Street Well field consists of two (2) separate wells with a combined capacity of approximately 350-400 GPM. Total current maximum production from all sources is 1500 GPM (2.16 MGD).

All of the current drinking water treatment facilities are located at the Marion County Well #1. The city operates an air stripping facility (installed in 1994-1995) at the Marion County Well site for removal of Carbon Dioxide gas. The water pH is elevated from a level of 5.5-6 to 7.0-7.5 following this procedure. Additional control for pipeline corrosion is obtained through the injection of zinc orthophosphate ($ZnPO_4$). Chlorination is performed using gaseous chlorine at the Marion County well. Sodium Fluoride is also introduced into the water at Well #1.

The 2000 Water System Master Plan notes that since the City of Monmouth uses groundwater exclusively, modifications to the Safe Water Drinking Act (SWDA) that affect surface water supplies have little or no impact to Monmouth. Recent water quality regulations enacted since 2000 that pertain to the City of Monmouth's water supply include new regulations for ground water and arsenic. Since Monmouth routinely chlorinates water delivered to customers, these new regulations do not represent a substantial concern to the city. The greatest water quality concerns for Monmouth include control of nitrates at the Marion County wells, and monitoring of synthetic organics at the Fourth Street field. Future water quality concerns affecting the City of Monmouth include continued monitoring of synthetic and volatile organic contaminants at all wells, nitrate monitoring at the Marion County wells, coliform bacteria monitoring at all wells, and possible surface water influence at the Willamette River Well Field and/or Marion County #2.

Source Water Assessment Plan

In 2005, the Oregon Department of Human Services, Health Services - Drinking Water Program and the Oregon Department of Environmental Quality, Water Quality Division - Drinking Water Protection completed a Source Water Assessment Report for Monmouth. The Source Water Assessment Program, mandated by the Safe Drinking Water Act, requires that states provide the information needed by public water systems to develop drinking water protection plans if they choose. That information includes the identification of the area most critical to maintaining safe drinking water, i.e., the Drinking Water Protection Area, an inventory of potential sources of contamination within the Drinking Water Protection Area, and an assessment of the relative threat that these potential sources pose to the water system.

The report assessed City Well #1 located in Marion County and Well #5 located in Independence. Assessment results indicate that Well #1 and Well #5 would be highly sensitive to a contamination event inside the identified Drinking Water Protection Area. The presence of several high-risk and moderate-risk potential contaminant sources within the protection area was confirmed through a potential contaminant source inventory. Under a “worst case” scenario, where it is assumed that nothing is being done to protect groundwater quality at the identified potential contaminant sources, the assessment results indicate that the water supply in these wells would be highly susceptible to a few of the potential contaminant sources. The analysis also found nitrates and naturally occurring selenium in these wells.

The assessment results also indicate that, at this time, the Well #1 aquifer is considered susceptible to viral contamination due to the presence of septic systems in the area..

The potential contaminant sources are listed in the table below.

Air, Water, and Land Resources, Quality Element - Table 1
Potential Contaminant Sources within each Two-year Time-of-Travel Zone
City Well #1 and Well #5

Well Number	Potential Contaminant Sources within each Two-year Time-of-Travel Zone
Well #1 (Marion County Well)	Rural homesteads with septic systems, above ground storage tanks, irrigated crops, a gravel pit, South River Road, and two possible pesticide/fertilizer handling/storage areas.
Well # 5	Irrigated crops, non-irrigated crops, and a railroad transportation corridor.

Source: Water Assessment Report for Monmouth, 2005

The report states that: "It is important to remember the sites and areas identified are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly."

The City currently takes several steps to reduce risks from contamination and ensure a safe drinking water supply. The City blends water from several wells to reduce nitrate and selenium concentrations. Even without blending, the amounts of chemicals in the water supply do not exceed acceptable levels.

The City is currently developing a new wellfield as a joint project with the City of Independence and will be constructing a new 1,000,000-gallon storage reservoir. The increased capacity will facilitate blending from various well sources as a means of reducing nitrate levels. The City also has the ability to perform continuous testing and treatment drinking water as necessary. The treatment facility at the new wellfield will also have the capacity to accommodate nitrate filters if required in the future.

The City also provides a minimum sanitary protective radius of 100 feet or 200 feet diameter for each well. For new municipal wells being developed in Independence, the City is establishing a minimum protective area of one (1) acre square established for each well, with the well established as the center of the acre.

Once the City has established additional capacity with planned system improvements a Wellhead Protection Plan can be developed. Wellhead protection is a plan designed to protect groundwater resources of public water systems. These plans include the determination of the area around the well most susceptible to contamination, the inventory of potential contaminant sources within that area, and the implementation of management strategies to reduce the risk associated with those sources.

Storm Drainage System

The City of Monmouth is generally divided into two drainage basins. The first is located to the extreme west and flows north and northeast to and through the university grounds to the swale that eventually empties into the North and Middle Forks of Ash Creek. The North and Middle Forks of Ash Creek above Gun Club Road in Independence drain some 13,400 acres, or about 21 square miles. The second drainage course runs through the south and southeast quarter of the city generally flowing due east to the city limits and eventually discharging into the South Fork of Ash Creek as it enters the City of Independence. The South Fork carries smaller flows with a drainage area of 4,300 acres (6.7 square miles) above Helmick Road.

Within the City, the storm drain collection system is generally made up of small (less than 36-inch diameter) pipelines, catch basins and open drainage ditches. Present drainage problems include minor flooding during very heavy rainfall due to undersized piping and lack of storm improvements. The

northwest part of town receives heavy sheet flow from the adjacent hillside. A formal storm system is needed to mitigate the minor flooding that occurs below the hill. New developments are required to provide storm drainage system compatible with the city system by detaining the storm water and releasing it at pre-development rates.

The DEQ has established Total Maximum Daily Load (TMDL) standards for water bodies located within the Willamette River basin. TMDLs limit the total amount of specific pollutants that may be discharged into a given water body. In 2008, the City of Monmouth developed a Stormwater TMDL Implementation Plan for Ash Creek. The City's stormwater system drains to the three forks of Ash Creek. The Implementation Plan includes action items to aid in decreasing water temperature, reducing bacteria, and reducing mercury discharge.

Land Quality

Land quality is protected in Oregon by regulation of hazardous waste and waste tire storage and transfer; and regulation of underground storage tanks and solid waste. Land quality can ultimately affect water and air quality.

Hazardous waste permits are required for activities that:

- Generate useless, unwanted or discarded pesticide or manufacturing residue that is toxic, corrosive, ignitable, or reactive, and
- Establish a hazardous waste disposal site.

Hazardous waste permits may be required for activities that:

- Generate hazardous waste and store it on site for more than 90 days, and
- Store and/or treat hazardous waste on site.

Western Oregon University is the only registered hazardous waste generator in Monmouth.

Oregon's Underground Storage Tank (UST) Program is part of DEQ's Land Quality Division. The UST Program handles issues related to tank registration and operating certificates; installation, operation and removal of USTs; cleanup of soil and groundwater contamination from petroleum leaks; training of system operators; financial liability protection for future leaks, contractors working on USTs and enforcement of state and federal UST rules.

Permits are required for underground storage tanks that:

- Contain petroleum products or listed chemical products such as gasoline, diesel, solvents, pesticides, and herbicides, and
- Are larger than 1,100 gallons, and
- Have more than 10% of the total volume (including piping) underground.

Underground storage tanks that are unused for a period of 12 months must be permanently decommissioned by either removing the tank or filling it with an inert substance. DEQ must be notified prior to activity, and a report and checklist must be submitted after the work is completed. The activity must be performed by a licensed service provider. Plans to treat petroleum contaminated soils from an underground storage tank release, on or off the site, will require a Solid Waste Letter of Authorization from DEQ and submitted with a Soil Treatment Plan.

Table 2 shows the DEQ database information regarding underground storage tanks in Monmouth, including decommissioned tanks. Active tanks in Monmouth are located at service stations at the intersection of Main Street and Highway 99W (Pacific Highway N.).

Air, Water, and Land Resources, Quality Element - Table 2
DEQ Underground Storage Tanks in the Monmouth Area

ID #	Facility	Location	Total Tanks	Active Tanks	Decommissioned Tanks	Permitted Tanks
826	Boise Cascade Region Office	450 Pacific Highway N.	1		1	
8392	Brandt's Sanitary Service	158 Pacific Highway S.	5		5	
762	Chevron USA #99035	113 Pacific Highway N.	8		8	
5539	Main Street Pizza	180 Main Street E.	5		4	1
11001	Marr Brothers	779 Church Street W.	1		1	
972	Pacific Highway Auto Care LLC	112 Pacific Highway N.	8	3	5	3
144	Shell - 507	595 Main Street E.	7	2	5	2
9089	Topa Mobil	350 Pacific Highway N.	4		4	
5310	Well #1 – Wastewater Treatment Plant	450 Hogan Road	5		5	
1992	Western Oregon University	Physical plant	4		4	

Source: Oregon DEQ, 2010

Oregon's Leaking Underground Storage Tank (LUST) Program is part of the DEQ's Land Quality Division. The LUST Program handles issues related to cleanup of soil and groundwater contamination from spills and releases from regulated underground storage tanks (USTs), contractors working on cleanup of soil and groundwater contamination at LUST sites and enforcement of state and federal rules.

DEQ databases indicated permits for leaking underground storage tanks in the Monmouth area. DEQ records identify leaking underground storage tank sites that have since been cleared of contamination. Table 3 shows information from the DEQ database for Monmouth. The database includes 16 leaking underground storage tank sites in Monmouth, four (4) sites of which did not include a cleanup end date. The below information should be considered minimum numbers since not all tanks are permitted and not all old tank locations are known.

Air, Water, and Land Resources, Quality Element - Table 3
DEQ Leaking Underground Storage Tanks in the Monmouth Area

Log #	Site Name	Location	Release Stopped	Cleanup Start	Cleanup End
27-84-4009	Bisland Mobil Oil	615 Main Street E.	02/09/1984	12/30/1987	N/A
27-91-4362	Brandt's Sanitary Service	158 Pacific Highway S.	11/25/1991	03/03/1992	N/A
27-94-4180	Heating Oil Tank	760 Main Street W.	10/24/1994	10/24/1994	08/09/1995
27-99-4069	Heating Oil Tank	684 Main Street W.	05/18/1999	05/18/1999	11/04/1999
27-01-6836	Heating Oil Tank	322 Marr Court	09/04/2001	08/18/2001	10/12/2001
27-95-5097	Heating Oil Tank	480 Boyd Lane	04/08/2002	03/06/1995	05/20/2002
27-97-4068	Heating Oil Tank	358 High Street N.	04/29/1997	04/29/1997	03/17/2000
27-98-4066	Heating Oil Tank	375 Craven Street N.	06/05/1998	06/05/1998	09/22/1998
27-90-4041	Chevron 9035	113 Pacific Street N.	10/24/1989	10/24/1989	12/02/1998
27-92-4164	City of Monmouth	401 Hogan Road	09/04/1992	09/04/1992	09/16/2002
27-07-1666	Conoco-Phillips 253975	112 Pacific Highway N.	N/A	N/A	N/A
27-96-4004	Main Street Pizza	180 Main Street E.	01/12/1996	01/12/1996	N/A
27-90-4172	Monmouth Shell Service	595 Main Street E.	04/01/1995	03/08/1992	04/11/2002
27-91-4134	WOSC	345 Monmouth Avenue N.	05/07/1991	05/07/1991	06/20/2006
27-05-2016	WOU	345 Monmouth Avenue N.	08/23/2005	09/19/2005	11/04/2005
27-89-4192	UNOCAL	112 Pacific Highway N.	10/31/1989	10/31/1989	09/29/2005

Source: Oregon DEQ, 2010

The Main Street Pizza site is located at the corner of Main and Knox streets adjacent to Main Street Park. The City's Park Master Plan includes eventually incorporating the property as park of Main Street Park. A gas station was formally located on the property and numerous contaminants have been identified .

An initial cleanup of the property in 2008 included excavation and landfill disposal of over 1,100 tons of petroleum contaminated soil and removal of more then 3,000 gallons of water from the hand-dug well on the property. Oregon DEQ has identified a number of issues that will need to be resolved before the site cleanup phase is complete or compliance monitoring could be performed. These include assessment of off-site contamination impacts to nearby utility trenches and further assessment of the soil and deeper groundwater conditions in the vicinity of the former hand-dug well.

Solid Waste

The City of Monmouth does not have a solid waste disposal facility. Local collection is handled by contract with Brandt's Sanitary or by individuals hauling their own waste. The company disposes waste at the Coffin Butte landfill near Corvallis. The Benton County Comprehensive Plan states that the landfill has approximately 40 years of additional capacity. Curbside recycling is available to citizens in the community. In 2009, curbside pickup was expanded to include yard debris.

The City's regional contact is through the Polk County Community Development Department, which administers a solid waste collection franchise ordinance. The Community Development Department also coordinates recycling, and household hazardous waste collection programs.

It is important that the City participate in a regional solid waste management program. A regional solid waste management program strives to maximize the use of existing sites, endorse energy conservation and recycling of wastes, and coordinates solid waste activities of counties in the region. The City of Monmouth supports a regional solid waste management program that includes recycling opportunities.

Air, Land, and Water Resources Goals and Policies

GOAL: To maintain and improve the quality of air, water, and land resources in Monmouth.

Policies:

- All development and activities within the city shall adhere to applicable federal, state, and local air, water, and land quality regulations and standards.

- In cooperation with appropriate agencies, Monmouth shall manage its air, water and land resources to ensure their protection, conservation, restoration, or enhancement.

- Monmouth shall use "best management practices" for air, land, and water resources in all City operations and capital projects.

- Monmouth will contribute to, or comment upon, regional water quality improvement planning and fish recovery plans undertaken by state and federal agencies by reviewing and responding to proposed policies and plans.

- Monmouth will promote solid waste recycling, reuse and disposal options by providing for the licensing and permitting of persons engaged in these activities as part of franchise agreements.

- As water system capacity is increased, Monmouth will protect significant groundwater resources by developing a wellhead protection plan.

- Monmouth will continue to implement the Stormwater TMDL Implementation Plan for Ash Creek.

- Monmouth will continue to support the regional solid waste management program.