

Land Use

Lower Spokane River Watershed (WRIA 54) Planning Issue Paper

The WRIA 54 Land Use Work Group (LUWG) developed this issue paper between November 2007 and April 2008. The purpose of this issue paper is to:

- Define goals for land use in WRIA 54;
- Document the land use issues; and,
- Identify potential solutions and recommendations to address the issues.

The LUWG presented the results of their discussions to the larger Planning Unit during development of this paper and received guidance from the Planning Unit on issues to be addressed and ideas for solutions. The LUWG developed this issue paper with the intent that the paper would be confirmed by the WRIA 54 Planning Unit and become a module within the WRIA 54 Watershed Management Plan.

What are the Land Use Goals for the WRIA 54 Watershed Plan?

Goals are visions for the future of the watershed and incorporate broad ideals that are often not tangible or possible to quantify. Goals are important to bring together stakeholders in a common effort to do the best for the watershed.

The goals for land use in WRIA 54, agreed by consensus of the Land Use Work Group are:

- Strive for consistency and coordination between the WRIA 54 Watershed Plan and local land use plans and development regulations.
- Coordinate water availability and areas of development.
- Strive for sustainable land use development. **Spokane County Planning will discuss.**
- Support property owners' rights, including legal access to water.
- Support public access to water for recreation.

What are the WRIA 54 Land Use Issues and Potential Solutions?

Current land use and future land use changes have the potential to impact the Lower Spokane River Watershed in a number of ways. These include changes in the timing and volume of streamflows, changes in groundwater levels and changes in surface water and groundwater quality. The LUWG agreed by consensus to document the following issues and develop potential solutions to address these issues. **The LUWG intends that the Planning Unit rank the potential solutions and select those for inclusion as recommendations and obligations in Watershed Plan.**

- There is a need for better connection between land use regulations and water availability.
- There is a need for better connection between land use planning and water supply planning.

- There is a need to protect rural land uses.
- There is a need to consider the impacts of land development (e.g., shoreline development, timber harvest, vegetation removal for land development, impact to wetlands and to and from stormwater / wastewater systems) on water quantity, water quality and habitat.
- There is a need to maintain and enhance sustainable agriculture through growth management and land use planning.
- There is a need to provide public access to important water related recreation areas.
- There is a need to evaluate beaver activities and associated land use impacts and water storage opportunities.

The sections that follow provide background information on each of the issues listed above, identify data needs (if any) and list the potential solutions agreed to by the LUWG.

There is a need for better connection between land use regulations and water availability.

Background and Current Situation

Washington State’s Growth Management Act (GMA) (Chapter 36.70A RCW) provides for land use planning with local control. The intent of GMA is to encourage conservation, responsible use of lands and resources and sustainable economic development. Under GMA, all counties are required to (RCW 36-70a-170): 1) designate and protect wetlands, frequently flooded areas and other critical areas; 2) designate farm lands, forest lands, and other natural resource areas of long term significance; 3) determine that new residential subdivisions have appropriate provisions for public services and facilities.

Comprehensive Land Use Plans include policies to guide development over the next 20 years for a number of topics, including: resource lands; rural lands and development; urban development; general land use; shorelines; critical areas; transportation; capital facilities. Development regulations implement the planning policies that are contained in the Comprehensive Plan. Development regulations include regulations associated with critical areas, shoreline master program, zoning and subdivisions. Under state law development regulations must be consistent with the Comprehensive Plan.

Spokane County and Stevens County are “fully planning” under GMA and, as such, are required to adopt Comprehensive Land Use Plans and Development Regulations and designate urban growth areas (UGAs) subject to GMA requirements. Incorporated municipalities within these counties are also required to plan under GMA. Lincoln County is not a “fully planning” GMA County, reflecting the low and primarily rural population base of the County. Lincoln County planning includes development codes and regulations. Lincoln County is not required to designate UGAs.

County planning representatives in WRIA 54 (including representatives from Spokane County, Stevens County and Lincoln County) acknowledge that land use planning must consider water availability to guide sustainable land use development. However, there is often insufficient technical information on surface water and groundwater availability to support land use decision making. Demonstration of water availability through reviewing area well logs, drilling wells and performing a

pump test is often the method of proving adequate water supply to develop, though it provides little insight on long term sustainability of water supply and the overall impact of development on water resources.

In Spokane County, there appears to be a reasonable process to assess water availability through platting and review for areas that occur within existing public water service areas since the water purveyors are involved in the review process (via Spokane County Coordinated Water System Planning). Outside of water service areas, the Regional Health District is currently the only agency that reviews Comprehensive Plan amendments, zoning changes and platting in terms of water supply although the Regional Health District's main objective is protection of human health and not regional water supply concerns. In addition, Spokane County does not currently require proof of water availability to support certificates of exemption for increasing parcel density.

In Stevens County, lower development densities have been assigned to areas that appear to have water availability problems (as identified using well logs on file with Ecology, regional soils / geology and public comments). In addition, proof of potable water supply is required for land division to less than 20 acres. Proof of water supply includes well drilling and testing or a hydrogeologic report and must be approved by the Regional Health Department.

In Lincoln County proof of potable water supply is required for land division to less than 20 acres. The project proponent must prove adequate potable water supply to the Regional Health District before plats are approved. Proof of water supply includes well drilling and testing.

The Spokane Tribe considers land use planning and water availability as a component of the Integrated Resource Management Plan (IRMP). Areas are designated within the IRMP for housing and growth and allow for development of clustered developments and community water systems. Home sites proposed outside designated housing areas are reviewed by the Spokane Tribe's Inter-Disciplinary Team and approved on the basis of water availability (as wells as the availability of other services such as power). The Spokane Tribe is currently considering development regulations for fee land (i.e., land within the Spokane Indian Reservation that is owned by non-tribal members).

Data Gaps / Additional Data Needs

The following data gaps were identified by the LUWG. Filling these data gaps will help with evaluating water availability to support future growth.

- Water supply and demand forecasts for subbasins and study areas.
- Build-out analysis for subbasins and study areas according to current zoning.
- Understanding of water resources available for use at the subbasin or study area scale.

Possible Solutions

The LUWG developed the following possible solutions to address the issue of a need for better connection between land use regulations and water availability:

Land Use Planning

- ***Recommend that Counties and Cities*** integrate information on WRIA 54 water resources technical information and current and projected water supply / demand with land use planning.
- Recommend that Counties and Cities identify and consider adding areas of strained water resources to ***Comprehensive Land Use Plans and Development Regulations*** (through for example, critical areas ordinance or water supply overlay zones).
- Recommend that Ecology provide technical support and funding to ***Counties and Cities*** to identify areas of strained water resources.
- Encourage land use regulators (Counties, Cities, Towns and the Spokane Tribe) and land developers to utilize plat conditions and/or encourage covenants that prevent development that requires significant landscape irrigation in areas of strained water supply.
- Recommend that Spokane County add demonstration of water supply as a condition for a certificate of exemption (C of E), or limit C of E's in some way, such as no more than creation of 3 parcels. Recommend that Spokane County require public review for C of E's.
- ***Recommend that Spokane County require a project proponent to demonstrate sufficient water supply for proposed and existing uses for Comprehensive Plan amendments, zoning changes, and platting.***
- ***Recommend that Spokane County and Ecology collaborate to develop guidelines for demonstration of water supply availability. Methods may include but are not limited to hydrogeologic investigation and characterization reports.***
- ***Recommend that Ecology provide technical assistance and funding for ongoing support in the implementation of Spokane County's guidelines to demonstrate sufficient water supply for proposed and existing uses for Comprehensive Plan amendments, zoning changes, and platting.***
- Pursue funding to conduct more regional water supply availability studies through WRIA 54 Watershed Plan implementation.
- Encourage the ***WRIA 54 Watershed Planning Unit*** to comment on Comprehensive Plan amendments, ***new division of lands*** and land use regulation changes to strive for consistency between Watershed Planning and land use planning.
- Recommend that Ecology review consistently and comment as appropriate on water availability related to SEPA reviews, which may include Comprehensive Plan amendments, ***new division of lands*** and land use regulation changes.
- ***Recommend that Counties, Cities, Towns and the Spokane Tribe review existing landscaping regulations for water efficiency and improve regulations as appropriate.***

- *Recommend that Counties develop and implement water use efficiency policies and development regulations / guidelines as a component of Comprehensive Planning. **Bruce Hunt (Spokane County) is considering this language.***
- *Recommend that Counties, Cities, Towns and the Spokane Tribe develop incentives for xeriscaping and use of native and/or drought resistant vegetation through existing and future planning processes.*
- *Encourage planning directors to consult with the WRIA 54 Watershed Planning Unit when considering extensions of vested plats.*

Studies / Monitoring

- Conduct build-out analysis for subbasins and study areas according to current zoning and projected water needs. *Note that Ecology guidance suggests using 20 year OFM projections for setting instream flows and allocating water for future out-of-stream uses.*
- Develop water supply and demand forecasts for subbasins and study areas.
- Support Ecology's ambient groundwater monitoring program.
- Recommend that Ecology consider the West Plains for an ambient groundwater monitoring program.
- Conduct studies that improve understanding of water resources in WRIA 54.

Funding

- Recommend that Ecology provide technical support and seek funding to identify and evaluate areas of strained water resources.
- Recommend that the legislature fund local governments to include consideration of water supply as a component of land use planning.
- Recommend that the legislature fund ambient groundwater monitoring.

There is a need for better connection between land use planning and water supply planning.

Background and Current Situation

Land use planning is the jurisdiction of County, City and Tribal planning departments. Water supply planning is conducted by water purveyors under the guidance and regulation of the Washington State Department of Health (WDOH). On the Spokane Reservation, water supply planning is conducted by the Spokane Tribe Public Works with technical assistance provided by Spokane Tribe Department of Natural Resources and Indian Health Service. The Land Use Work Group believes that there are

processes that could be modified to improve the connection between land use planning and water system planning so that land uses appropriately reflect water supply availability. Water supply availability for land use includes water available from surface water and groundwater resources in the vicinity of the land use as well as water available from other locations via transmission lines.

Water systems are required to have approved water system plans on file with the Washington State Department of Health (WDOH). The Washington State Department of Ecology (Ecology) conducts review of water rights and expansion of water system service areas via a Memorandum of Understanding (MOU) with WDOH to review water system plans and plan updates. In accordance with the MOU, it is Ecology's responsibility to determine if expansion of the water system service area boundary is "inconsistent with" Watershed Plans. Ecology typically involves Watershed Planning Units in determination of whether or not the system expansion is "inconsistent with" Watershed Plans.

Currently water purveyors are required to provide copies of water system plan updates for review to WDOH and to neighboring water systems. The Land Use Work Group believes that it would be beneficial to include the WRIA 54 Planning Unit on the review list so that the Planning Unit has an opportunity to comment on other aspects of water system plans, including conservation measures.

Spokane County completed the first Coordinated Water System Plan (CWSP) within Spokane County in 1982. The CWSP was updated in 1989 and again in 1999. Coordinated Water System Planning in Spokane County includes the purveyor located in the northern 2/3 of Spokane County, including the following purveyors in WRIA 54: Fairchild Air Force Base, Medical Lake, Airway Heights, City of Spokane, Indian Village Estates, Stevens County PUD and a number of other smaller water systems. The primary objective of the 1999 update of the Spokane County CWSP was to meet the public drinking water supply needs of the planning area and to achieve coordination between water service and the Growth Management Act (GMA).

Data Gaps / Additional Data Needs

None identified.

Possible Solutions

The LUWG developed the following possible solutions to address the issue of a need for better connection between land use planning and water supply planning.

Water System Planning

- Encourage water purveyors to participate in local land use planning.
- Recommend that Spokane County initiate an update of the Spokane County Coordinated Water System Plan and encourage water purveyors to participate.
- Establish a WRIA 54 water system plan review sub-committee to develop a review checklist and review water system plans and water system plan updates to ensure that water system plans are "not inconsistent" with the WRIA 54 Watershed Plan.
- Recommend that purveyors provide copies of water system plans and water system plan updates to active Watershed Planning Units and that WDOH list the active Watershed Planning Units on the list of entities in Water System Plan Submittal Form (Form #331-040).

- Encourage water purveyors to keep their water system plans current with WDOH and to contact WDOH for a pre-planning meeting prior to preparing water system plans / updates (contact: WDOH front desk # 509-456-3115).
- Obligate WDOH to fulfill their obligation to enforce water systems that are out of compliance to be in compliance. ***Sara to communicate with WDOH on this.***

Funding

- Recommend that WDOH provide funds for the update of the Spokane County Coordinated Water System Plan.
- Recommend that the legislature provide funding for Watershed Planning Units to develop checklist and review water system plans and water system plan updates.

There is a need to protect rural land uses.

Consider consolidating this issue and possible solutions into the Water Management Issue Paper.

Background and Current Situation

The Land Use Work Group acknowledged that permit-exempt wells are often the only source of water for development in rural areas. To protect rural land uses, the Land Use Work Group agreed that development to non-urban densities should be supported without requiring connection to public water if public water is not available in a reasonable and timely manner and where proposed density is supported by water availability.

Lincoln County, a primarily rural county, relies on permit-exempt wells (with an allowable 5,000 gallon per day limit) to support development and includes flexibility for the number for lots per permit-exempt well by allowing engineered water systems that incorporate water conservation measures.

Data Gaps / Additional Data Needs

- Understanding of hydrogeologic units and water supply availability in WRIA 54.

Possible Solutions

Land Use Planning

- Employ tools and technologies (e.g., water conservation) that coordinate water availability and development in rural lands.
- Support use of permit exempt wells in areas without public water service ***and in areas where water supply availability can be shown (e.g., by well drilling and testing)***. Evaluation of larger water uses may be needed by the WRIA 54 Planning Unit. ***Duplicated in WMWG matrix.***

There is a need to consider the impacts of land development (e.g., shoreline development, timber harvest, vegetation removal for land development, impact to wetlands and to and from stormwater / wastewater systems) on water quantity, water quality and habitat.

Background and Current Situation

The Land Use Work Group recognizes that various form of land development have the potential to detrimentally impact water quantity (i.e., stream flows and groundwater levels) and water quality (both as a result of decreased water quantity and as a result of contaminated water discharges). As examples: land development in urban areas has resulted in creation of impervious surfaces and production of stormwater; along shorelines, development may result in loss of habitat and increased water temperatures if riparian vegetation is removed; land clearing for construction can result in discharge of turbid water to surface water; and, improper timber stand management can have impacts on runoff timing and water quality.

This issue incorporates a number of processes and jurisdictions including:

- Shoreline Master Programs
- Comprehensive Planning and Critical Areas Ordinance
- Ecology's Environmental Assessment Program
- County and City sewer and stormwater planning.
- Regional health districts (for drinking water quality and septic systems)
- WDOH (protection of public health)
- DNR (regulation of state forest lands)

Data Gaps / Additional Data Needs

None identified.

Possible Solutions

Land Use Planning

- Encourage *public* participation in Shoreline Master Program updates and critical areas ordinance updates.
- Recommend improved coordination between land use regulators (Counties, Cities and DNR) and Ecology regarding development and construction permitting. ***Sara will talk to Jeremy – would it be appropriate for LUWG to recommend that Ecology use DNR's classification rather than waters of the State classification.***
- ***Encourage Counties and Cities to develop land clearing and grading ordinances or BMPs that are based on NRCS FOTOG / Eastern WA Stormwater Manual BMPs. For all land clearing /***

grading or just for land clearing / grading that has the potential to impact surface water resources?

- ***Encourage Counties and Cities to consider incentives for low impact development that incorporates measures such as pervious surfaces and on-site stormwater treatment.***
- ***Recommend that Counties and Cities hire or retain qualified wetlands scientists to review wetland delineations.***
- ***Encourage Counties to consider land use policies that preserve vegetation in natural (i.e., undeveloped) drainages.***
- ***Recommend that DNR consider watershed management and delayed surface water yields in management of state trust lands.***
- ***Recommend that DNR educate landowners on watershed management and delayed surface water yields including benefits of planting seral species.***
- ***Recommend that Spokane County, Stevens County and Lincoln County educate landowners on watershed management and delayed surface water yields including benefits of planting seral species.***

Sewer System and Stormwater Planning

- Encourage public participation in County and City Sewer System Planning and Stormwater Planning.
- Recommend that that Cities and Counties, WDOH, Ecology and health districts address inadequate wastewater and stormwater systems (e.g., combined sewer, septic systems and stormwater overflow systems).

Studies / Monitoring

- ***Support restoration of wetlands for water storage and water quality improvements where feasible.***

There is a need to maintain and enhance sustainable agriculture through growth management and land use planning.

Background and Current Situation

The Land Use Work Group acknowledged that conversion of agricultural land to developed land is occurring in WRIA 54, primarily along the margins of urban areas. The Land Use Work Group agreed that farmland is important to the watershed. Farming produces important food products and does not use chemicals as intensively as urban and rural land uses.

Data Gaps / Additional Data Needs

None identified.

Possible Solutions

- *Encourage agricultural practices that reduce runoff and increase infiltration.*
- *Encourage clustering and agronomically viable land.*
- *Discourage the promotion of purchase of agricultural water rights to support development and for water rights mitigation. Sara will discuss with Ecology.*

There is a need to provide public access to important water related recreation areas.

Background and Current Situation

Public access to water for recreation is addressed through Shoreline Master Programs and through Avista's FERC licensing of the Spokane River Project. In WRIA 54, the primary shorelines are associated with the Spokane River and include Lake Spokane and the Spokane Arm of Lake Roosevelt.

Data Gaps / Additional Data Needs

None identified.

Possible Solutions

- *Identify potential sites for public access to water for recreation that could be acquired or improved.*
- *Support City, County, State and National efforts to acquire or improve public access to water for recreation.*
- *Support the efforts of the Spokane River Forum to improve public access to water for recreation.*

There is a need to evaluate beaver activities and associated land use impacts and water storage opportunities.

Background and Current Situation

Two issues associated with beaver activity have been identified in WRIA 54: damage to trees and landscaping in some areas along Lake Spokane; and, lowering of dissolved oxygen in the upper Chamokane Creek drainage (by creating ponds that result in warmer water with higher organic matter) (Stevens County Conservation District, 2000).

Management of beaver activities is the jurisdiction of Washington State Department of Fish and Wildlife (WDFW). Recently, legislation has been enacted to allow relocation of beavers for conditions that meet the required criteria, as determined by WDFW. The Lands Council is applying for a grant for Columbia River Management funds to evaluate beavers to improve water storage in WRIA 55 and 57. The next funding cycle for Columbia River Management Program funding is in October 2008.

Data Gaps / Additional Data Needs

- Understanding of the land use impacts of beavers in WRIA 54, specifically on Lake Spokane.

Possible Solutions and Recommended Actions

- *Consider relocation of beavers to willing landowners.*
- *Consider beavers to improve upper watershed water storage.*