# Capital Region Private Sewage Best Management Practices Study

# **Briefing Document**

#### **Summary**

This provincially-funded, multi-municipal project will investigate shared approaches and best practices that can assist local governments in developing or improving decentralized wastewater management and administrative procedures.

The project will provide coordinated planning advice and analysis so that municipalities can be better assured that their strategic decisions are in the best interests of their landowners and heedful of available resources.

The project can assist municipalities to better manage their internal processes regarding private sewage systems, namely those involving permitting, inspections, enforcement and planning.

#### Background - Challenges and Issues

The Capital Region Growth Plan calls upon area municipalities to take shared approaches in land use planning and other matters. Some of these approaches are prescriptive that call upon rural municipalities to concentrate residential development in clustered growth and traditional growth areas.

In either case, residential development is expected to is expected to be denser to reduce the environmental footprint. This creates some challenges from a wastewater management perspective.

#### Municipal Servicing

Capital Region Land Use Policies place emphasis for clustered rural residential development to be serviced by municipal infrastructure. This may not be a practical approach because private developers may be hesitant to front required infrastructure costs to serve their developments, and municipalities will one day take on management and fiscal responsibilities necessary to maintain that infrastructure.

Furthermore, such infrastructure maintenance requirements could discourage municipal spending in other priority areas. Also, rural growth could place unanticipated additional capacity and treatment burdens on current centralized wastewater management facilities.

#### Communal Wastewater Systems

Under the Capital Region Land Use Plan, municipalities can choose to deploy communal wastewater systems to serve rural residential developments. Although these systems are in use in other parts of Canada and the United States, they are a relatively new concept in Alberta. Some municipal planners and elected officials have expressed hesitancy in making use of these systems because their long-term effectiveness, operational costs, liability issues and other factors are not well understood.

#### **Environmental Protection and Public Safety**

Septic systems can be used in traditional rural residential developments. However, the Capital Region Land Use Plan states that these developments must follow regional land use principles, which may lead to increased density levels.

Several science-based factors need to be carefully considered in order for private sewage systems to work effectively. Soil types and structures need to be understood, topographical evaluations need to be considered and setback distances from buildings, property lines and water courses must be plotted. When development density levels increase, these factors become increasingly critical.

## New Home Buyer Protection Act

Passed earlier this month, the Act states in part that delivery and distribution systems related to plumbing will be covered under warranty for a two year period. However, according to Municipal Affairs Safety Services, it is unclear if private sewage systems will be included as a plumbing distribution system or exempted entirely. If it is included, accredited municipalities may need to place additional consideration upon their permitting and inspection practices. (Please note that the impact on municipalities and agencies is only speculative at this point. More specifics should be made available in the coming few months.)

#### Solutions and Outcomes

The project will quantify these challenges and arrive at working-level solutions that can be shared on a regional basis. These solutions will help meet regional land use planning trends while ensuring landowners can be serviced responsibly through effective and safe wastewater management processes.

Based on discussions with project stakeholders, the expected projects could include:

Explore the development of shared protocols and resources for the approval and operation of communal wastewater systems.

Explore the development of protocols for sharing inspections, permitting and enforcement policies, principles and resources.

Compare project participant attitudes toward growth plans, policies and principles outlined in the Capital Region Land Use Plan with local needs, priorities and trends.

## Expected project outputs could include:

A study exploring regional agreements on the approval and operation of communal wastewater systems that support consistent wastewater service delivery.

Development of new policies that will support the use of shared permitting and inspection resources and best practices.

A study to see how regional Quality Management Plans and perhaps the Safety Codes Act can be clarified to provide more consistent decentralized wastewater service delivery.

A study to determine if new onsite wastewater technologies can be better permitted by the Province in order to support servicing needs in high density rural residential developments.

A study to determine if the Capital Region Land Use Plan can be amended to better reflect local issues, needs, priorities and trends relating to the provision of decentralized wastewater service for rural residential development.

### **Project Approach and Timelines**

Ideally, the project will involve Strathcona County, Parkland County, Leduc County and Sturgeon County. The project can still move forward with fewer participating municipalities. Only two need to be registered as project participants.

The project will be 100% funded under the Municipal Regional Collaboration Program. A grant application will be submitted before November 30, 2012. The project will begin upon grant approval and will I be completed approximately 12 months from that date, depending on project scope.

Parkland County has been approached to assume the role of project manager. The manager's role is to distribute grant funds and report on project progress to Municipal Affairs. A project grant agreement will be signed between Municipal Affairs and Parkland County

A consultant will be hired to undertake the study and satisfy all reporting requirements. The consultant will provide weekly updates, monthly reports and other related deliverables as project parameters and grant administrative requirements dictate. These reports will be reviewed and approved by Parkland County before the municipality forwards the reports to Municipal Affairs.

Presentations to participant councils and/or senior staff will be made at strategic points throughout the project's lifecycle. Joint and individual meetings will be held with other stakeholders as required. The aim will be to keep time requirements of municipal administrations and councillors to a minimum.

Other stakeholders have been briefed and will be communicated with throughout the project. These stakeholders are Alberta Environment and Sustainable Resource Development, the Alberta Safety Codes Council, the Capital Region Board, the Alberta Capital Region Wastewater Commission and non-formally participating rural municipalities in the Capital Region.