

Staff Report to the Ames City Council

**Policy Considerations of Providing Utility Services
Outside the Ames Corporate Limits**

January 11, 2011

The City of Ames is increasingly being looked to as a potential regional provider of water and wastewater services. The question whether or not to provide municipal services outside the city limits is an important policy decision for the Ames City Council. There are a myriad of goals and priorities that offer both advantages and disadvantages on either side of the decision.

Longstanding language in the Section 28.503 of the *Ames Municipal Code* limits the provision of any municipal utility service connection outside the corporate limits of the City without the express written authorization of the City Manager. When such a connection is authorized, the City Manager may require any reasonable special condition deemed necessary to ensure compliance with the policies, procedures, and development plans of the municipal utilities.

On April 13, 2010, Council referred to staff a letter from the South Squaw Valley homeowners' association requesting permission to meet with city staff to explore the possibility of the City providing water and sewer services to the subdivision. In July 2010, staff received an informal inquiry from consultants working for the City of Gilbert related to wastewater services. This report outlines the implications of a policy decision to provide water service outside the Ames city limits. This report is intended to provide a generic discussion of relevant policy issues exclusive of any specific request.

This report is being provided in response to the City Council's April 13, 2010 referral. If the City Council desires to take any additional action on the request from the South Squaw Valley homeowners' association, additional direction to staff will be necessary.

BACKGROUND

As environmental and drinking water regulations continue to evolve, the levels of treatment required of utilities are increasingly becoming more sophisticated. Homeowner associations and small communities are faced with the double challenge of first building and then maintaining sophisticated treatment facilities. The costs may be simply out of reach for their limited customer base, even with subsidized loans and extended repayment terms.

As treatment systems become more complicated, regulators have required higher certifications of the staff that operate the treatment facilities. For small utility systems, it can be exceedingly difficult to staff this type of position, as the required knowledge and skill level is quite high, yet the work is often less than full time. Many smaller communities are simply unable to hire operators that meet the state's requirements. As a result, state regulators are beginning to require small systems to evaluate connecting to a larger nearby utility as a way of ensuring environmental protection and public health. Larger utility systems, such as Ames, already have both well-trained staff and properly designed treatment works.

Connection to larger treatment systems generally provides a higher level of treatment for drinking water and wastewater. For example, an advanced secondary wastewater treatment plant, such as the Ames facility, is capable of producing a higher quality effluent than a wastewater lagoon system, thus providing an overall reduction in pollutant loading to the environment.

Ames utilities are widely recognized as providing exceptional quality service. The service is as good as or better than a small homeowner association or small community can manage with their limited resources. From their perspectives, this may make Ames utilities more attractive for small systems than providing these services themselves.

LAND USE POLICIES TO STEER GROWTH

One of the many reasons for adopting and following a comprehensive land use policy is to provide municipal services as efficiently and effectively as possible. This is especially important in the case of water and sewer lines where large expenditures and significant advanced planning are required.

A traditional tool for managing growth in the urban fringe has been to limit access to water and sewer services. Rural developments generally rely on septic systems instead of sanitary sewers and on private wells as opposed to municipal water systems capable of providing fire protection. **Cities have long relied on granting access to these "urban services" as a way of encouraging annexation where growth was desired and generating property tax revenues, which is the lifeblood for many city services. Similarly, the denial of water and sewer service has been a technique to limit urban sprawl outside the corporate boundaries.**

EXISTING AGREEMENTS FOR SERVICE OUTSIDE OF THE AMES CORPORATE LIMITS

The City of Ames currently provides water or sanitary sewer service outside of the corporate limits under the following limited circumstances:

City of Kelley – Sanitary Sewer Service

Since the mid-1980s, the City of Ames has provided sanitary sewer service to the City of Kelley. Providing this service was a required stipulation in obtaining the federal grant funds to construct the Ames Water Pollution Control Facility. The contract with Kelley was updated in 2005 after it was learned that the then-existing language precluded Ames from collecting reimbursement from Kelley for damages (\$181,000) to the Ames sanitary sewers caused by the Kelley wastewater. This damage illustrates the inherent risks to either party of entering into any type of contractual agreement. It is simply not possible to envision everything that could arise over the long life of such an agreement. The City of Kelley pays a monthly minimum bill that is twice the minimum charge for customer accounts inside the Ames city limits and 1.15 times the unit rate paid by Ames customers. As a result, the city receives approximately \$25,000 in revenue per year for this service.

Xenia Rural Water System – Water Service

In 1996, the City entered into an agreement with Xenia Rural Water District to provide drinking water through a single master meter on the north side of Ames. The contract limits the amount of water Xenia can use each day (250,000 gallons per day), with an extra-use fee being imposed for consumption above that amount. As part of the original agreement, Xenia made a one-time reimbursement for existing capacity. This payment did not grant Xenia ownership; it simply was a reimbursement for infrastructure improvements already made by the City. Those funds were used by the water utility to partially pay for the construction of wells in the Youth Sports Complex Well Field. Recent history reflects the use of only 9,000 gallons per day by Xenia, or revenue of approximately \$4,300 per year.

The City of Ames Rural Water Utility

State law has given rural water agencies authority to provide water service in rural areas. This service sometimes encroaches into a city's two-mile fringe area. In these situations, the rural water agency must give notice to the neighboring city of its intent to provide water service in that area. If the city determines that it desires to someday grow into that portion of the fringe area the rural water agency hopes to serve, the city may reserve the right to provide water service there. This declaration prevents the rural water agency from providing water service to the area. However, if that reservation is made, state law requires the city to provide service to the area within four years. Since this situation should occur only in areas which are designated in the LUPP for annexation in the near future, such water service outside of the city limits should be temporary.

In order to provide for this mandated water service, the municipal code needed to be modified to establish connection fees and ongoing water rates, as well as to adopt metering and cross-connection control provisions. Therefore, in 2009 the City Council authorized the development of our own "rural water utility." The rate structure adopted by Council established minimum bill and unit rate charges that were 1.15 times that being charged customers within the corporate limits.

It is staff's opinion that the existence of rural water systems and the associated mandate to provide water outside of the city limits have served to promote urban sprawl throughout the state. Fortunately, to date only one property is being served by this provision.

IMPLICATIONS FOR PROVIDING INFRASTRUCTURE TO NEW AND EXISTING AREAS

Extension of water lines outside city limits may involve service to a small development(s) in somewhat isolated locations that do not facilitate connection to a looped system. Providing water to a small development with no ability to loop the system can result in a low turnover in the water. This, in turn, leads to reduced chlorine disinfectant and an increased potential for bacterial and chemical contaminants. This effect is magnified if the distribution system is sized to provide fire protection.

Consideration needs to be given to the capacity of existing infrastructure to handle new demands from outside city limits. Plans are currently being developed to construct a new treatment plant with a 25 percent increase in capacity. It is being designed to accommodate a population of 65,000 people as specified in the LUPP and an additional 1.5 mgd anticipated for growth in new industries. However, this plant is still, at least, four years away from becoming operational. The City's Water Pollution Control Plant has minimal additional capacity, and is under pressure during wet-weather events due to increased flow rates. The WPC Plant has reached its design life, and it is possible that a capacity expansion will be required within the next decade.

The drinking water distribution system needs to be carefully planned and expanded in an orderly manner to avoid inefficient design and unnecessary expense. Extending a distribution system capable of providing fire flows to a rural subdivision would result in much higher initial costs and concerns about maintaining water quality. Extending a system without the ability to provide fire flow likely means the system would need to be replaced should annexation later bring the subdivision within the city limits.

Consideration also needs to be given to the buried infrastructure already in place within the City. Moving drinking water out and sanitary wastes in will consume capacity in the existing piping networks. This would hasten the time when expensive main expansions would be required.

PRICING CONSIDERATIONS

Rates for water and wastewater customers within the city limits are established in Section 28 of the *Ames Municipal Code*. It is important that any service provided outside the corporate limits not be subsidized by rate-payers within the City. Charges for distribution and collection system infrastructure, metering and billing, and consumption charges need to reflect the actual cost of providing service. It is important to note that revenues generated from outside customer connections and service fees must be accounted for separately from those of the existing water utility. The key legal test is that existing water customers cannot subsidize those outside the City who receive service from the City of Ames.

As described above, rates paid by the City of Kelley for wastewater service are contained in a contract for service that specifies that the minimum bill will be twice that contained in Section 28, and the consumption charge will be 1.15 times that contained in Section 28. This wording allows the rates to automatically adjust as the City Council changes the ordinance rates. A similar rate mechanism was incorporated in 2009 when the city-owned rural water utility was established to provide water to customers where the City had denied a rural water agency the right to serve a property.

A different rate model has been used with the contracts to Iowa State University and the USDA facilities on Dayton Avenue. These contracts are based on an annual reconciliation of the actual costs to provide service to those customers. The reconciliation process can be tedious, and the inclusion or exclusion of specific expenses can be somewhat subjective.

It should be emphasized that providing water service, with relatively small corresponding revenues, to small residential enclaves like Squaw Valley does little to reduce the need for rate increases for our customers within the city limits.

IMPLICATIONS FOR OWNERSHIP AND MAINTENANCE OF SATELLITE INFRASTRUCTURE

The challenges of providing the service are not over when the infrastructure has been built. Regular maintenance is needed on a routine basis, and periodic major maintenance needs are neither insignificant nor inexpensive. Regular flushing of hydrants and cleaning of sewers is important to maintain public health and aesthetics. Water mains and sewer breaks are a fact of life and could be budget-busters for small developments.

If service is provided outside the corporate limits, a clear policy for ownership of the connecting infrastructure must be established. Either the infrastructure belongs to the private development, with the city having no role or responsibility in operating or maintaining it; or the infrastructure belongs to the city, with operations and maintenance costs built into the unit rate charged for the service. However, the implications to the city of a failed or poorly maintained private system or the challenges of city employees

working outside of the city limits in non-city easements must be considered. Some of these challenges are described below.

Extending city services carries with it an extension of the city's regulatory liabilities. This is true regardless of whether the remote subdivision is inside or outside of the city limits. For example, many drinking water quality regulations are based on the portion of the distribution system with the longest residence time, or the "oldest" water. As described above, this may become a challenge in a small subdivision that sits off by itself with no cost-effective way to loop the distribution system.

If the water distribution system were owned and operated by a city, then the city utility would have a responsibility to perform periodic testing of the water to ensure compliance with drinking water standards. The cost of performing this sampling increases as the travel time to the farthest points in the distribution system increases.

On the other hand, if the subdivision were to become a "consecutive system," its homeowners' association would be required to monitor water quality itself. (A "consecutive system" is a system that purchases water from another system for resale to its own customers.) The drawback to a city is that, under new EPA rules, a water quality issue in the consecutive system could trigger increased monitoring in the city's system as well. Thus, a poorly maintained consecutive system could create added regulatory challenges for the City.

Similar considerations exist for the sanitary sewer system. The U.S. EPA is currently placing a high emphasis on managing peak wet-weather flows in collection systems. It is possible that a poorly maintained sanitary sewer system could result in excessive flows into a city's system. It is also possible that a commercial or industrial customer would locate in a rural subdivision that would discharge contaminants into the collection system that would have an impact on the city's ability to meet its discharge limits or to beneficially recycle its biosolids.

Finally, consideration needs to be given to properties adjacent to a new sewer system. The *Iowa Administrative Code* states at 567-IAC-69.1(3)a(2), "When a public sanitary sewer becomes available within 200 feet, any building then served by an on-site wastewater treatment and disposal system shall connect to said public sanitary sewer within a time frame or under conditions set by the administrative authority." The "administrative authority" is defined as the local board of public health. Thus, even if a new trunk sewer is constructed to serve a specific rural housing development, provisions in the *Iowa Administrative Code* could mandate that a city accept additional rural customers in proximity to the sewer.

SUMMARY OF ADVANTAGES AND DISADVANTAGES TO THE CITY OF AMES

Advantages

- Providing city water service eliminates the need for multiple neighboring systems to drill wells for individual properties or subdivisions, reducing the potential for interference with city wells and the potential for contamination of the aquifer.
- Providing city sewer service reduces the potential for groundwater contamination from poor-performing septic tanks or from other types of homeowner association managed systems.
- Providing sewer/water service in the fringe could allow a city to require owners of served properties to support future annexation of their property, which may be helpful in the case of what might otherwise be an involuntary annexation.
- City utilities could experience a minimal increase in revenue that exceeds the cost to provide the service, thereby allowing fixed costs to be spread over a larger customer base.

Disadvantages

- Extending city water/sewer services into rural areas would act as a disincentive to annexation, thereby resulting in even more fringe area growth outside of the municipal limits. This would lead to an increased demand on city streets, parks, and other amenities without the associated property tax revenue needed by the city to support the increased demand.
- Extending a city's water lines to remote, isolated subdivisions could result in water quality challenges. Regardless of whether the distribution system in the subdivision is owned and operated by the City or by the homeowners' association, there will be regulatory risks to a city.
- Extending city utility services outside of the city limits would consume existing "capacity," both in the treatment plants and in the interconnecting piping networks.
- Extending city utility services outside of the city limits would pose unique challenges for city employees working in non-city property.

CITY STAFF COMMENTS:

The City of Ames wants to be a good neighbor and provide assistance to adjacent property owners when possible. However, it is our primary responsibility to assure that such actions benefit our city residents. Because staff believes that the City Council should not willingly engage in a policy that promotes property tax expansion outside of the city limits, that the City would undertake significant obligations and risks by providing water service in rural areas, and that servicing relatively small residential areas will not provide sufficient revenue to impact a reduction in the rate increases envisioned for our utilities, staff recommends that the Council decline the request from the Squaw Valley homeowner's association for the City of Ames to provide water service to their subdivision.

