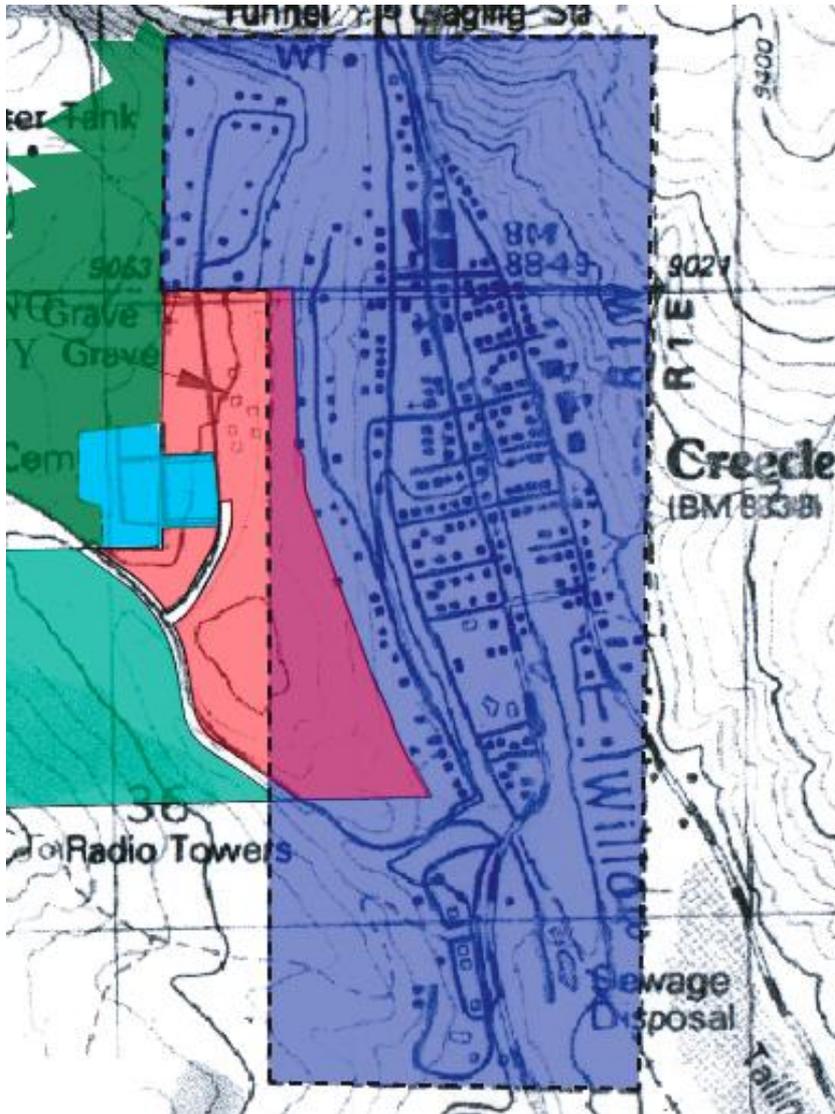


CREEDE
AMERICA





Annexed in 2006 to the City of Creede, Creede America has taken a comprehensive approach to developing a new neighborhood that is green not only in the construction of the homes, but in the long term energy demands of the homes and the neighborhood.

Creede America is a walkable neighborhood with a new city park as the centerpiece. A footpath connects Creede America to downtown Creede, encouraging residents to walk, rather than drive to the heart of town.



Homes in Creede America are relatively small in size. From an architectural standpoint this keeps them consistent with the scale of the older homes already in the City of Creede. But there are added benefits:

- By nature a smaller home consumes fewer materials in construction
- A smaller home requires less energy to heat.



At 9000' feet in elevation, Creede's long cold winters make heating a home by far the most energy intensive aspect of the life cycle of any home built in the area.

The readily available energy options in the Creede area are either delivered propane or electric:

- Delivered propane means that homeowners are subject both to the cost of the propane as well as the cost of fuel involved in the delivery.

- Electric heat is incredibly expensive and inefficient. Electric Thermal Storage, or ETS units can be cost effective, however changes in power provider policies and peak and off-peak hours can have a significant impact on costs.

- Ground source heat pumps are currently the most energy efficient way to use electricity to provide heat to a building.



The big disadvantage to Ground Source Heat Pump systems is that they require significant up front costs to install. There are 6 residences with GSHP systems operating in Creede today, with a total of 18 boreholes between them. To help contain costs, drilling crews have been mobilized on two separate occasions and have installed loops for three homes during each trip.



Drilling costs have averaged \$23.00/foot in Creede America. All 6 operational systems provide 100% of domestic heat. 4 systems also provide 100% of domestic hot water. The largest systems in Creede have four 300' boreholes for a total drilling cost of \$27,600.00. The smallest system has two 300' boreholes and cost \$13,800.00 to install.





One of the big advantages to GSHP technology over other types of green technologies lies in the fact that it places very few constraints on the design of a building.





The Rust house combines a GSHP system for domestic heat and hot water with a grid tied photovoltaic array.



The loops in our boreholes have a minimum expected lifespan of 50 years. With anticipated advances in photovoltaics and other green power sources, the costs of operating these GSHP systems should continue to drop.



For more information on Creede America, feel
free to visit us on the web at
www.creedeamerica.com

In Creede, feel free to stop by Creede America
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