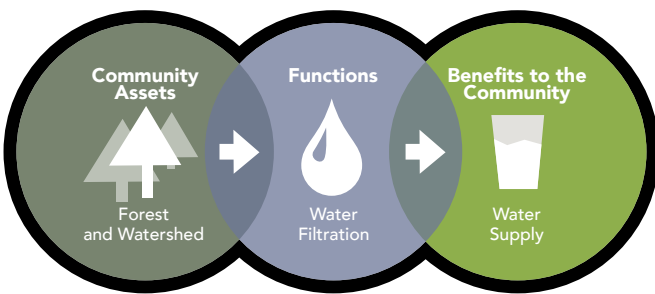# Our Natural Economy

It's working for us all the time.

Valuing Our Community Assets

The Natural Economy of Alaska's Mat-Su Basin is a study that looks at our natural resources, like forests and wetlands, as economic assets that benefit our community over time. For example, wetlands are nurseries for salmon, which provide a *direct input* to our economy. Wetlands also help us *avoid costs* because they act as sponges to moderate potential flooding, function as "free" waste treatment, and are part of our water supply system. Not only do we reap the benefits, assets like these are self-maintaining and, when managed sustainably, have longer lifespans than man-made infrastructure.

Community Assets → Functions → Benefits to the Community
Forest and Watershed → Water Filtration → Water Supply

Some Lands Are Worth More

This report uses accepted economic assessment tools to evaluate the benefits we receive from different land cover types in the Mat-Su Borough. GIS mapping was used to get an idea of how many acres of each land type in the valley. Then the ecosystem services provided by each land cover were used to determined its value. The report evaluated 13 ecosystem services across nine land cover types. (see table to right). Some lands have more value than others. While the Mat-Su has more shrub/scrub than any other land cover, wetlands have a higher value.

What's It All Worth?

Let's go back to our example of the water-filtration service provided by wetlands. Think about how many millions of dollars it would take to build, maintain, and ultimately replace a water filtration plant as a substitute for naturally filtered groundwater. The cost is substantial and this example is just one benefit from one land type. What's it all worth? Approximately $35 billion of direct inputs (e.g. salmon) plus avoided costs (e.g. water treatment facilities) to our economy each year, or an estimated $1 trillion over 100 years. When these asset values are considered in land use decisions by governments, private owners, and organizations, we all benefit.

Read the complete report at www.eartheconomics.org.

ECOSYSTEM SERVICES AND LAND COVER TYPES VALUED IN THE MAT-SU									
	Cultivated	Forest	Grasslands	Ice	Mudflats	Riparian Buffer	Rivers and Lakes	Shrub/Scrub	Wetlands
Food					X				
Raw Materials		X							
Water Supply						X	X		X
Biological Control	X	X							
Climate Stability	X	X	X			X	X		X
Moderation of Extreme Events						X			X
Pollination	X								
Soil Formation	X								
Waste Treatment							X		X
Water Regulation		X							
Habitat and Nursery		X					X		X
Aesthetic	X					X	X		
Recreation and Tourism		X					X	X	X

KEY

Ecosystem service produced by land cover and valued in this report	X
Ecosystem service produced by land cover but is not valued in this report	
Ecosystem service not produced by land cover	