

# **Fresh Coast Forest Fund**

#### **About Fresh Coast Capital**

Fresh Coast Capital is an impact investment firm committed to revitalizing post-industrial communities across the United States through innovative investment solutions. The Fresh Coast Forest Fund seeks to address one of the major barriers to that revitalization: brownfields.

#### **The Brownfield Problem**

According to the EPA definition, brownfields are abandoned, idled or underused properties whose redevelopment is encumbered by real or perceived contamination. Brownfields sites range from single parcel properties that housed former gas stations and dry cleaners to large-scale decommissioned factories and other industrial facilities. Brownfields have a significant negative impact on their surrounding communities, including:

- Health and environmental risks of contaminated soil and groundwater
- Lost tax revenues for local government
- Police, fire and other public services needed to respond to vandalism, dumping and other safety issues
- Negative psychological effects on the local community related to living around blighted/vacant properties

The GAO estimates that there are as many as 450,000 brownfields throughout the U.S. Some estimates show that there are 5 million acres of abandoned industrial sites in our nation's cities - roughly the same amount of land occupied by 60 of our largest cities.

Though brownfields are found across the country, they are heavily concentrated in the post-industrial "rust belt" of the United States, stretching from Northern Wisconsin to Western New York in states along the Great Lakes. Once the industrial heartland of America due to easy shipping access, the rust belt has seen economic decline as a result of automation, globalization, the decline of the steel and coal industries, and subsequent population migration to the south and west.

# Impediments to Redevelopment of Brownfields

- Lack of necessary funding for cleanup
- Concerns over liability
- The need for environmental assessments of the properties
- Uncertainty over cleanup standards
- Unfavorable neighborhood and market conditions
- Reluctance to invest in distressed communities due to concerns with urban socio-economic conditions

Brownfields in the most desirable locations (i.e., downtown urban centers in stable real estate markets) with profitable development potential are more likely to overcome the environmental risks, find funding, and see the project through to completion. However, pieces of land with no immediate development potential, particularly in highly economically depressed cities such as Gary, IN and Flint, MI, have much more limited opportunities to clean up their most challenging brownfield sites.

# THE FRESH COAST SOLUTION

Brownfields with no near-term opportunity for cleanup and redevelopment are the ideal candidates for the **Fresh Coast Forest Fund**, a fund that will lease brownfield properties from municipalities and private landowners to plant hybrid poplar tree farms. Hybrid poplars are notable for their abilities to simultaneously remediate land through phytoremediation while also producing a harvestable product. Hybrid poplars can be processed into biomass for renewable energy in as quickly as four years or for timber, pulp and paper in as quickly as eight years. Poplars have the ability to clean soil and groundwater affected by contaminants such as petroleum hydrocarbons, chlorinated solvents, metals, pesticides, explosives and excessive nutrients. Hybrid poplars also prevent soil erosion and sequester carbon on the site.

### Phytoremediation- a Primer

In a natural environment, vegetative and woody biomass like grasses and trees provide ecosystem services. These services range from reducing runoff of chemicals into fragile aquatic ecosystems, maintaining a healthy hydrological system through roots' capacity to break up soil clods, returning nutrients to the soil, sequestering carbon, providing habitat for fauna, and preventing erosion and nutrient-rich topsoil displacement from wind or water. Additionally, in the case of brownfields, the natural systems of a specially optimized biomass crop can be used by environmental engineers or foresters to remediate aspects of the ecosystem and help restore it to its pre-contaminant state. Certain types of biomass, including grasses, shrubs, and trees, tend to be the first to repopulate an ecosystem following a drastic event such as fire in the natural world or the release of a major contaminant or effluent. Similarly, other types of biomass are well suited to remove contaminants from the soil. Environmental remediation companies, foresters, and environmental engineers have studied phytoremediation with grasses and trees for land and wetland remediation projects and many federal programs are supportive of this, particularly when sensitive water supplies or fisheries are of concern. The Great Lakes Region can and has applied many of these principles to protect its watersheds and environmentally sensitive lands.

#### **Investment Opportunity**

Our model is a hybrid of two proven opportunities applied to the brownfield market. Poplars are well-documented remediators for brownfields- the USDA, Army Corps of Engineers, US Department of Energy, and USDA Forest Service have done research on phytoremediation for decades. Poplars also have a track record for producing profitable forest products. Greenwood Resources manages nearly 32,000 acres of poplar around the world and have proven this to be a profitable business since 1998. Our approach brings these strategies together at a scale that delivers real environmental and financial impact.

#### Expected Source of Fresh Coast Returns

Timber, pulp, and paper trees harvested every 8 years Timber is a \$27.2B industry

Short rotation trees harvested every 4 years for biomass US spent \$1.2B on biomass for electric power last year

Land appreciation value

Equity Promote giving Fresh Coast 15-20% of appreciation value at time of sale or reassessment

**Remediation** fees

Charge a remediation fee as an alternative to equity promote Future monetization of ecosystem services

Provide remediation services on currently operating industrial land to help owners meet regulatory requirements

#### **Return Profile**



# Cash Flows



#### **Investment Criteria**

development

- Sites should not have significant structures requiring demolition
- If sites are contaminated, they should be approved for remediation through planting trees
- Sites should be about 40 near-contiguous acres
- Sites should be near a profitable market for forest products
- Sites should ecologically support growth of poplar trees Site owners should be willing to wait 8-16 years for

**Fund Structure** 



#### Case Study: Elkhart Poplar Farm

A brownfield site in Elkhart, IN is being transformed from vacant property into a profitable tree farm and nursery. The 3.5 acre lot was previously a railroad roundhouse and has been vacant for 50 years; the soil is not suitable for residential use or food agriculture. 6,531 trees were planted in May 2011, with a potential for 69,000 trees from new nursery cuttings- enough to create a scalable industry and seed 95 acres of additional property. Elkhart County alone currently imports 20 million panels of wood annually, many from as far as Europe.

Social and economic impact: Besides eliminating a public eyesore, the tree farm provides a local and sustainable source of wood for local manufacturers. This reduces transportation costs and related carbon emissions.

**Environmental Impact**: The phytoremediation capabilities of the trees can clean the soil such that the property could one day be eligible for residential development opportunities.

#### (source: Delta Institute)

#### **Return Enhancement Opportunities**

Additional return sources that Fresh Coast will explore include:



# **Fund Details**

Investment Manager	Fresh Coast Capital
Fund Name	Fresh Coast Forest Fund
Fund Structure	Evergreen Fund with 10-year renewal periods
Fee Structure	1% management fee, 20% performance fee
Series 1 Size	\$50 Million
Acreage	25,000