



Reallocation of Resources Initiative

Program

Safe Harbor is a multidisciplinary environmental consulting group specializing in environmental risk assessment, coastal erosion response, conflict resolution and education. The Reallocation of Resources Initiative (RRI) was created as a pilot project in response to our organizations involvement in local building and understanding of the complexities surrounding natural and manmade resource recycling. RRI's main goal is to decrease the amount of resources diverted to landfills by connecting local communities and green builders with reclaimed resources for Reuse with future construction and energy generation.

Introduction

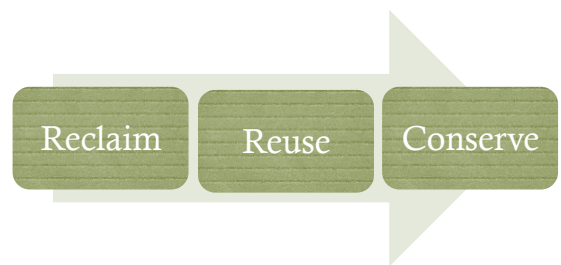
SafeHarborEnv.com Gordon Peabody, 2015 gordonpeabody@gmail.com

Public Awareness

Safe Harbor recognizes that community support and involvement is imperative for program success. Building has a profound effect on the environment. Presently, buildings use 40% of raw materials globally which is the equivalent of 3 billion tons annually and make up 30% of waste output or 136 million tons annually (Lenssen and Roodman, 1995). Safe Harbor's RRI program aims to decrease Cape Cod's ecological footprint by reclaiming and reallocating materials that otherwise would be considered waste.

Green Builders

Participation in Safe Harbor's RRI program will assist builders in attaining necessary credits (up to 13) under the materials & resources section to receive LEED certification. This program diverts construction and biomass materials from the waste stream linking materials and outer Cape builders. In addition to improving environmental sustainability, Safe Harbor's RRI program is also financially sustainable with minimal to cost presented to property owners for removal of recyclable materials, cost reductions also apply to end-users, or builders. This program will promote the conservation of financial resources as less new materials are purchased and more reallocated. The National Association of Home Builders suggests that 8,000 pounds of waste is generated in a "typical" 2,000-square-foot home. This places pressure on both natural resources and financial resources. On Cape Cod, Disposal can cost from \$600-\$1,000 for construction projects and up to ten times that for demolition projects. Safe Harbor's pilot program is designed to redistribute keep natural and economic resources within communities. Money is saved through lower disposal costs and reduced materials purchases while creating job stimulus through redistribution of materials.



Protocols

- Initially Safe Harbor would conduct a pre-activity waste stream audit
- Safe Harbor would create a redistribution management plan
- Recyclable materials would be identified with the approval of contractor
- Available resources would be listed on links such as Safe Harbor or community web site
- End users participating in this Initiative would sign a waiver of responsibility
- Green Builders participating in this Initiative would be listed on Safe Harbor's web site
- Material removal from a structure would be the responsibility of the end user or by agreement with the contractor for an additional charge.
- Material sorting onsite would be the responsibility of the end user or by agreement with the contractor for an additional charge.
- Material transport would be the responsibility of the end user or by agreement with the contractor for an additional charge.
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Reconstruction

The following are materials from demolition sites that could be considered for reconstruction: bricks; paving stones; concrete and asphalt (crushed as "T" base for paved areas); crushed concrete for drainage systems; steel beams; wood (trim boards, decking, flooring); dimensional wood (2x6, 2x8, 2x10, 2x12, beams); composite materials (counter tops, decking); architectural materials (doors, cabinets, paneling, railings and cabinets) as well as miscellaneous materials such as toilets, sinks, tubs, mirrors, copper pipe, garage doors, and fencing. Windows from existing buildings would not meet new code requirements for "hurricane proofing".

Biomass Energy

Oil dependency has increased our vulnerability to price fluctuations, according to Bp in 2007 20,698 barrels of oil were consumed per day in the U.S. Safe Harbor's biomass for energy program offers an environmentally and financially sustainable alternative for energy generation, whereby combustion of reclaimed biomass for home heating decreases household costs and dependency on oil.



According to the Energy Information Administration 3.2% of U.S. energy was supplied by biomass and government agencies

project a steady increase in biomass energy in the future. Safe Harbor's pilot program aims to increase community access to biomass energy materials from tree removal and construction and demolition sites. This would reduce the amount of biomass currently in the waste stream. This represents a unique opportunity to redistribute economic and biomass energy within communities. Providing biomass energy reduces home heating costs and decreases pressure on natural resources, while creating job stimulus through redistribution of materials. Reclaimed biomass materials may include: seasoned and unseasoned wood, flooring, decking, trim, beams, branches, logs etc.

Works Cited:

Lenssen and Roodman (1995). Worldwatch Paper 124: A Building Revolution: How Ecology and Health Concerns are Transforming Construction. Worldwatch Institute.

Bp.<http://www.bp.com/sectiongenericarticle.do?categoryId=9023771&contentId=7044470> Accessed 2008.



Above image by Safe Harbor. Shows removing copper pipe.



Above image by Safe Harbor. Shows deconstruction in sensitive area.

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