



One Planet Action Plan for Grow Community



### One Planet Living<sup>®</sup> at Grow Community

Grow Community is the 1st community in the Pacific Northwest designed for living within the limited resources of our one planet.

The Grow Community neighborhood on Bainbridge Island, Washington, has been carefully planned to make an 80% ecological footprint reduction practical (and even convenient) for residents to achieve – without sacrificing modern comforts. Residents will enjoy healthier lifestyles, and a higher quality of life.



The One Planet Living<sup>®</sup> program envisions a world in which it is easy, attractive, and affordable for all of us to lead happy, healthy lives with fewer of the earth's resources.

One Planet Living<sup>®</sup> uses ten guiding principles as a framework for building healthy, vital communities.

The program was developed by BioRegional, an international, non-profit environmental organization. Grow Community will be one of five endorsed One Planet projects in the world, and the second in North America.

As a resident of Grow Community, you don't have to make big sacrifices, learn a bunch of new stuff, or completely turn your life around to live here. We did that for you.

## one planet living®at grow community

If everyone in the world lives like an average European, we will need 3 planets to live on.



If everyone in the world lives like an average North American, we will need 5 planets to live on.



What if we didn't have unlimited clean water and air, and only a finite area in which to have built places and play places, farming places and wild places?

What if there were just ONE planet?







#### Health and Happiness

Imagine requiring very little to be happy and healthy, yet feeling that your life was full. Imagine connecting, inspiring, and thriving among those around you. Imagine if this was simply just the good life, and green was just a color.



#### Culture and Community

Imagine knowing the full history and heritage of the place you call home. Imagine having more art and drama in your life. You know, the kind that doesn't require a remote control or a therapist.



### Zero Carbon

Imagine living in a house that produces more than it consumes. Have you ever seen the meter run backward? You will.



#### Local and Sustainable Food

Imagine getting your hands dirty from harvesting your own food from your neighborhood pea patch, or selecting the freshest seasonal varieties from your farmer's market. Imagine shopping at a grocery store that buys most of its fruit and vegetables from local farmers.



### Sustainable Transport

Imagine being a five minute walk from everything you need. Imagine taking your bike in for a tune up. Imagine not driving "thru" anything, especially your life.



#### Sustainable Materials

Imagine breathing easier knowing your home won't have that "new house" smell.

#### Equity and Local Economy

Imagine living in a home and a community where the cost of living makes sense. Where you can choose to own a car. Or not. Where the energy company sends you a check rather than a bill. Where you can contribute to growing a true local economy.



#### Land Use and Wildlife

Imagine knowing which month brings berries, the difference between a spruce and a fir, and the nesting season of migrating robins, hummingbirds, and eagles. Imagine learning all this from your kitchen window, your patio. Imagine nibbling on raspberries on your walk to the movies.



#### Sustainable Water

Imagine knowing where your water comes from, and where it goes when very little of it goes down the drain. Imagine knowing where the island's salmon streams are, when the lowest low tide is, and how to water the garden from your rain barrel.



#### Zero Waste

Imagine telling your grandchildren, "when I was your age, they actually had to come and pick up garbage in a big truck."



## Health & Happiness. Residents are fitter, healthier and safer, and enjoy more social lifestyles.



Our vision is a safe neighborhood where people of all ages appreciate and aspire to "genuine wealth" – enjoying time with loved ones, connecting to their local community, eating well, exercising and enjoying the outdoors.

Imagine living in a safe community where health & happiness opportunities are "built right in" to daily life. Where your commute makes you fitter, because you can walk or bicycle to work or to the store. Where you know all your neighbors – in walkable neighborhoods you meet people often. Where it is easy to access healthy local foods grown in community gardens or on nearby farms. Where making a meaningful contribution to your community is natural, not just because you know your neighbors well enough to care about their well-being, but because choosing to live here is an investment in your health and our common future.

## **One Planet Action Plan Highlights**

**Our Mission:** To create a community culture that promotes a high quality of life for all residents, with health and happiness as a core value and a primary reason to be part of Grow Community.

**Our Approach:** Grow Community is designed to increase the quality of life by encouraging active lifestyles, designing for intergenerational community connections, and providing opportunities for improved management of (and deepened relationships with) resources and the natural surroundings. The built environment and the governance systems created for the Grow project will seek to inspire and facilitate these relationships while also remaining flexible to the changing desires, needs, and solutions brought by the residents.

- Connectedness. Residents will experience increases in their connectedness, as measured by number of neighbors known, number of good friends in the community, the degree of involvement with neighbors and how much longer a resident plans to stay in the community as compared to other neighborhoods.
- Children. Children will have an increased sense of well-being and increased quantity of outdoor play compared to other neighborhoods.
- **3. Health.** Grow Community residents will walk or bike more compared to other neighborhoods.
- Happiness. Using the Sustainable Seattle Happiness Index survey, community members will improve their own baseline scores of community health and happiness.
- 5. Health Indicators. Grow Community will expect to see continuing improvements in health indicators such as asthma, body mass index, and mental health as compared to personal baselines on move-in and to Kitsap County or Washington as a whole (or to Bainbridge Island, if this data is available).



# **Culture & Community.** Local heritage and the arts. Creating a close-knit community.



Grow Community's design, daily activities and social events will create opportunities for residents to participate in social activities based on small town values, with targets for high rates of neighborliness, volunteerism, and active community life. A 21st-century eco-culture will reflect the area's rich agricultural heritage and celebrate individual responsibility to conserve resources for our children's future.

Imagine attending social gatherings and neighborhood events made all the more lively by dozens of your neighbors who know you well and appreciate your contribution to the community. Imagine a community that everyone can feel a part of and have the opportunity to help build. Imagine a diverse community, where you can learn with others, and that always has something interesting and new to participate in. Imagine a community that remembers its history of strong connections with the earth, and builds on that to develop its own culture connecting it to farming, the land, clean air and water.

### **One Planet Action Plan Highlights**

**Our Mission:** Grow Community aspires to be a catalyst for creativity and a stronger sense of community within the culture of Bainbridge Island, both through its design and physical facilities and through the dedicated efforts of its residents.

**Our Approach:** In planning the built environment and providing for ordinary and special activities, make Grow Community a place where all residents feel at ease, and where others feel welcome, whether they are walking through or joining in activities.

- Active Community Life: Grow residents will be surveyed for an annual improvement for the first 5 years in satisfaction with community life; measures of participation in community programs and events; levels of volunteerism, with at least 50% of residents volunteering at least once a year; number of Grow and Bainbridge residents counted amongst friends; participation in governance
- 2. Gardening: The Community Gardens, will be interwoven into the cultural life of the community, promoting lifelong learning from nature and through gardening.
- **3. A Vibrant Community Center:** Establishment of community space during the first stages of construction, as early as possible. Establishment of a One Planet Center, integrated into the Community Center, to act as the nucleus of the emergence of an eco-culture at the Grow Community.





### Zero Carbon (buildings). Lower utility bills, future-proofed against rising energy costs.

Grow Community's Zero Carbon strategy to **eliminate 100% of carbon emissions from buildings by 2020** will mean lower utility bills, reduced environmental impacts, and an opportunity for citizens to work together to reduce dependence on coal and foreign oil.

Imagine living in a warm, comfortable home without concern for high energy costs. Imagine knowing that making your home comfortable on the inside isn't polluting the air on the outside. Or imagine knowing that events half a world away no longer have an impact on your monthly budget to heat and power your home. Imagine lower bills, more comfortable homes and a clean environment.

## **One Planet Action Plan Highlights**

**Our Mission:** Achieve Zero Carbon for buildings by 2020 by combining energy-efficient building design and renewable electricity generation through on and off-site renewable power.

**Our Approach:** Grow Community will achieve Zero Carbon for all residential and commercial buildings by increasing building efficiency up to 30% beyond Washington Energy Code, by encouraging residents to reduce their per capita energy use, by powering all buildings with renewable energy. Buildings will be designed to maximize energy efficiency with air tight, super-insulated building envelopes and energy efficient systems. The buildings will be oriented to maximize roof area for solar panels. Carports may be constructed in some areas to create additional area for panels to charge electric vehicles.

- Eliminate carbon emissions from buildings by 2020. Total greenhouse gas emissions will be reduced from 4.5 tons per person, to 0 tons/kWh by 2020.
- Provide renewable energy sources. Options will be provided for all buildings to be powered by renewable energy sources, including homes, multifamily units and community buildings.





Residents at Grow Community will find it convenient to enjoy fresher, healthier diets that strengthen local farms and economies. Every household can grow their own food in the community garden, bringing community together and healthy food to the table. Grow Community has set targets for increasing consumption of organic and local foods, **while reducing intake of high-carbon foods by 70%.** 

Imagine a community where local, healthy food is the norm rather than the exception. A community where you have the opportunity to grow your own food in community gardens, or buy fresh organic food from a local farmers market. Imagine picking up your eggs from the community center, delivered weekly by a local farmer. Imagine cleaner creeks and rivers, less smog and greenhouse gas emissions from food transport and petroleum-based fertilizers and harmful pesticides. Imagine community partnerships with small farms where your children can see where their food comes from.

### **One Planet Action Plan Highlights**

**Our Mission:** Create on-site production of fresh vegetables and produce to be consumed by residents. Balance preservation of agricultural land with development; establish community gardens for use by residents. Educate residents through programs that encourage a healthier, lower-carbon diet.

**Our Approach:** To decrease carbon from food transportation, Grow Community will encourage at-home gardening and food preparation. Every household at Grow Community will have access to a dedicated garden space and related education and support. Food-producing plants and trees will create an "edible landscape" in residential and public areas. Local food-growing will make use of resources that would otherwise have been thrown away to produce healthy food for the community: using clean roof runoff to water crops, and compost from kitchen food scraps to capture valuable nutrients and enrich the soil onsite. Grow Community will also increase access to local and organic foods produced on the Island by creating partnerships with local farmers.

- 1. Healthier, fresher, lower-carbon diets. Organic food will make up 75% of the diet of Grow residents. 70% of the diet will be seasonal or local food and high-carbon food consumption will be reduced to 1/3 of the U.S. average.
- Increase gardening. Every household will have a dedicated garden, with 65% participation in garden programs by 2020.



### **Sustainable Transport.** Lowering the cost of getting around. Encouraging zero-carbon options.



Imagine strolling along bicycle-friendly, child-safe streets and car-free lanes, past community gardens and wildlife habitat. Imagine the convenience of the nearby neighborhood center bustling with cafes and shops selling local and fair trade goods. Imagine your morning commute being a healthy breath of fresh air as you walk through or to town on your way to work, stopping to chat with neighbors at the grocery store or coffee shop. Imagine taking a few unhurried minutes on your lunch break to check on your child at the neighborhood daycare center just around the corner from your home.

## **One Planet Action Plan Highlights**

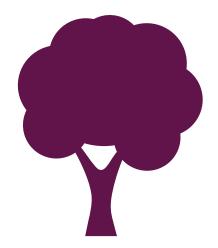
**Our Mission:** Grow Community will become an example of how a development project can reduce emissions attributable to transportation by creating alternative transportation options and demonstrating innovative programs, technologies, and lifestyle choices. The community will lead Bainbridge Island toward further improvement of low carbon transportation choices and be a source of influence to encourage participation in regional initiatives.

**Our Approach:** The approach at Grow Community will be to significantly reduce carbon emissions for all travel within the site and minimize emissions as much as possible when residents or visitors come to or leave the site. The site is purposefully located close to nearby transportation, retail, and services to allow for 5-minute living, reducing overall carbon emissions.

- Car ownership. By 2016 car ownership at Grow Community will be = .6 cars/household. Accomplishing this goal will lead to a significant reduction in emissions, dramatically reduced needs for parking accommodations, and create noticeable increases in available disposable income for residents.
- Reduced Green House Gases (GHG). By 2020 GHG emissions attributable to road travel will be reduced to .76 tons/ person on site - a 76% total reduction.
- Increase Car-sharing. The increase in the number of residents using car-sharing will be measured each year, to show the extent of car sharing use. This measure should also assess the carbon footprint of shared vehicles.



# **Sustainable Materials.** Breathe easier with healthier finishes and better indoor air quality.



Grow Community will avoid the worst building materials and practices – for example by **eliminating major sources of PVC in the homes** – and invest in the local economy. **70% of all lumber will be from FSC-certified or local sustainably-managed sources.** 

Imagine a community where homes and businesses are built from healthy, natural, reclaimed and recycled materials to reduce embodied energy, waste production, and improve indoor air quality. Where the walls and floors have a history, a story to tell. Where instead of filling landfills with the old, and destroying our natural areas to get the new, the old materials are given a new useful life. Imagine a home built with non-toxic materials so that the air inside is fresh and clean.

### **One Planet Action Plan Highlights**

**Our Mission:** Demonstrate that design with and use of sustainable and low impact materials can be achieved to create well-designed homes at reasonable price-points.

**Our Approach:** Create efficiencies in materials sourcing and construction to allow the project to achieve the goal of using sustainable materials to create cost-efficient homes. Wherever possible, use local, reclaimed, renewable and recycled materials in construction to minimize transport emissions, spur investment in local (non-fossil fuel) natural resource stocks and boost the local economy.

- Use sustainable materials in construction. Reduce the embodied carbon of the project by using locally sourced or locally manufactured materials and products wherever possible.
- Reduce waste from materials during construction. All recyclable or reusable materials will be diverted from landfills during construction.
- 3. Promote sustainable materials and consumption in community life. The use of sustainable materials in future building and remodeling projects will be encouraged. Programs will be created to inform and enhance consumer behavior around sustainable and healthy products. Sharing, reuse and recycling of consumer goods will be promoted.



# **Equity & Local Economy.** Supporting local shopping, fair trade, and collaborative consumption.

Grow Community will boost the local economy with both for-sale and rental housing. Residents will have easy access to local shopping and a farmers market. An EcoConcierge program will make it easier to shift to less wasteful "collaborative consumption" – saving money, resources, and storage space by sharing tools, vehicles, workspaces, etc. with neighbors and fostering a sense of community.

Imagine a community where people can afford to live close to good jobs, in housing they can afford. Where going shopping helps to create jobs for your friends and neighbors. Where the things you do purchase from afar don't exploit others. Imagine a wide range of housing where diverse residents take active roles in the governance and management of their neighborhood. Imagine an influx of new green jobs in your neighborhood where people are working to make the air cleaner, reduce pollution, and conserve resources for our children's future.

### **One Planet Action Plan Highlights**

**Our Mission:** Grow Community will be an example of how equity and diversity can be supported by an intentionally designed community, where the richness of a mixed age, ability, socio-economic and cultural community can grow together to demonstrate that diversity is an asset and that the whole is more than the sum of its parts.

**Our Approach:** The community will be designed to attract a diverse population and create a safe and economically accessible neighborhood. The design of the project will address the need for varied housing types by providing both rental and home ownership opportunities. Programs such as the renewable energy program, car share program, equipment share, local food production, and remote work opportunities will create opportunities for further reduction of the cost of living at Grow Community, promoting equity, diversity and overall quality of life for all residents.

- Age and income diversity. A diversity of age and economic groups will be represented in the residents at Grow Community.
- Design for accessibility. Ten percent of the housing will be universally designed, creating accessible spaces and options for residents to age in community.
- **3. Design built environment and community programs to encourage connection.** Within 18 months of occupancy residents will know more than 50% of their neighbors in each micro-neighborhood.



### Land Use & Wildlife. Smarter use of land. Certified backyard habitat. Access to natural spaces.

Grow Community will demonstrate how appropriate urban densities can maximize green infrastructure and urban food production while providing an attractive, comfortable and healthy living environment. The project site will include areas for native vegetation and urban agriculture, enhancing well-being and the beauty and value of the property. At least **10% of the site will be certified as Wildlife Backyard Habitat** with West Sound Wildlife Shelter by providing diverse water, food, nesting and cover.

Imagine living in a modern community where nature is a part of everyday life. Where your walk to work starts in your community garden, or under the shade of trees. Where community paths link you to local greenbelts and nearby Eagle Harbor. Imagine the sense of well-being from being part of a community where the local forested area and number of native species increases each year. Where there are a range of micro-habitats such as rain gardens that support local fauna, and where diverse food, nesting and cover on site attract native birds and wildlife for you and your children to enjoy.

### **One Planet Action Plan Highlights**

**Our Mission:** Grow Community will provide a model for urban living in a diverse and productive natural environment while making appropriate and efficient use of land. The project will demonstrate how appropriate urban densities can be constructed to incorporate green infrastructure, allow for urban food production and provide an attractive, comfortable and healthy living environment.

**Our Approach:** The project site will include areas for both native vegetation, (e.g. forest canopy, wooded wetland, shrub wetland, bog, and open shrub), and sustainable food production, (e.g. orchard and p-patches). Plants will be selected to support restoration and cultivation goals. The project will be designed and managed for maximum diversity, habitat support and food productivity. Residents can engage in an active exploration of habitat restoration and urban agriculture.

- Create natural habitat and boost wildlife onsite. Provide 35% tree canopy, averaged over the project site, by 2020. Preserve and augment the forested area of the site (NW corner) noting increase and maturation in native plant and animal diversity, especially indicator species (2020).
- 2. Make efficient use of land in harmony with the character of Winslow. Design the project with urban densities consistent with City of Bainbridge Island Zoning Code and Comprehensive Plan.





Residents at Grow Community will find it almost effortless to **reduce their water consumption by 47%**, down to just 43 gallons of water a day. Smarter water use – achieved through efficient fixtures, rainwater harvesting, grey water reuse, rain gardens – means residents will have lower water and energy bills. **Stormwater runoff at the site will be treated** to meet Washington State Department of Ecology standards – which will result in cleaner water ending up where nature intended, in the bountiful bay waters around Bainbridge Island.

Imagine fresh, clean water as nature intended. Imagine living in a home that automatically cuts your water consumption in half, not only lowering your water bills and energy bills, but also leaving more fresh water for local wildlife. Imagine rain gardens to filter storm water, beautify the neighborhood, and create temporary habitat for local species during the rainy season. Imagine fresh, clean water in your neighborhood and from your tap.

### **One Planet Action Plan Highlights**

**Our Mission:** To provide clean, aesthetic surface water for the benefit of the community and the environment while demonstrating that a healthy community can live on a fair share of water.

**Our Approach:** Grow Community will achieve its mission by designing and implementing a system of strategies that addresses all components of water on the site. The first step in this process will be the design of an effective water consumption reduction program that will include efficient water fixtures, drought tolerant landscaping palette, water efficient irrigation methods, leak detection/prevention techniques and a water conservation culture. To meet the water needs of the development a multi-tiered system will be implemented beginning with harvested rainwater, possibly treated gray water and finally municipal water resources. Surface water on the site will be protected and integrated into the development to provide benefits to the ecosystems on site and to the residents. The quality of the surface water leaving the site will be ensured by providing effective treatment through low impact development practices.

- 1. Reduce total water consumption by 47% by 2020, from the average per capita base line for Kitsap County of 81 gallons of municipally supplied drinking water per capita per day down to 43 gallons.
- 2. Improve quality of runoff. 95% of the total runoff from pollution generating impervious surfaces will be treated to meet Washington State Department of Ecology standards.



# **Zero Waste.** Smarter recycling, less packaging. Using nutrients from organic waste in our gardens.



Only **2% of all waste** will go to landfill during construction. By 2020, the Zero Waste program at Grow Community will have **reduced waste generated by residents by 70%.** This will create a model for waste management in Washington State, generate fertilizer from organic waste, and make it more convenient to reduce the amount of your household waste that goes to landfills. This will radically reduce the impact of landfills and methane, a potent greenhouse gas.

Imagine parks and public spaces where children run and play, grandparents sit on park benches, and passersby stop to admire public art – all made from reclaimed and reused materials. Imagine having a home that is free of fossil fuel power. Imagine being able to shop at Winslow grocers and retail stores that go out of their way to reduce unnecessary, wasteful packaging. Imagine living in a community where safe disposal of toxic substances, batteries, or electronics are as easy as recycling paper or bottles.

### **One Planet Action Plan Highlights**

**Our Mission:** Grow Community will work toward a goal of Zero Waste in all aspects of the community, from design and construction through the life cycle of the project. Throughout the project, opportunities to minimize waste generation and increase reuse and recycling will be implemented and continually improved as more ways to reduce the waste stream occur.

**Our Approach:** Grow Community will create a culture that is conscious of its waste generation and disposal. Beginning with design and construction and continuing throughout the establishment of the community itself, attention will be paid to waste generation and avoidance of excessive materials and packaging, as well as waste disposal. Facilities and programs will be established to make recycling, reuse, composting and other innovative waste reduction measures simple and easy to participate in. Educational programs will help residents understand the continually evolving opportunities to reduce the amount of waste generated that is ultimately sent to the landfill.

- 1. Reduce construction waste by 98%. During construction, 98% of waste will be diverted from the landfill, either reused or recycled.
- 2. Reduce, re-use, recycle, and compost at least 70% of waste by 2020. The percent of material sent to landfill compared with total baseline generation will be reduced from 32 gallons per household per week down to less than 9.6 gallons per household per week, where the baseline is the average generation of waste for residential use on Bainbridge Island.