

Surely, nobody has anything against the idea of a sustainable society. But how is it to be achieved? And what can we ourselves do when everybody else insists on taking their car to work? This is how people usually argue. People do not see any direct relationship between their own way of life and the way nature reacts.

This has been tackled in Seattle on the western seaboard of the US. This is where the concept of sustainability factors was first tested within the built environment.

By Birgitta Bruzelius

Guest from Seattle:

# People's involvement is the key

Seattle is inhabited by nature loving people who like to roam in the mountains and to fish in the rivers. This is where the term *sustainability factors* was coined. These factors relate ppm and other concepts which are difficult for ordinary people to understand with values that people are really concerned about. The reports issued every six months do not say how much pollution has risen or dropped in the rivers, but say whether the number of salmon swimming up the rivers in the area has risen or dropped. If the number of salmon has decreased, this is something that people here really care about, and they ask themselves what they can do to reduce water pollution. Involvement and a sense of shared responsibility become established, and municipal planners can gain popular support when it comes to changing habits or implementing action programmes.

This is what the head of the Center for Sustainable Communities at

Gary Lawrence, head of the Center for Sustainable Communities at the University of Washington in Seattle, has now moved to the Institute for Public Policy and Management (IPPM) at the same university.

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Seattle is near extremely beautiful nature. When the inhabitants of the city hear that the number of salmon that swim up the river is on the decline, they are more prepared to change their habits so as to reduce water pollution than if they receive traditional reports on the deterioration of water quality.

CASCADES NATIONAL PARK.  
PHOTOGRAPH: KEVIN SCHAFER, NATURBILD.



**Pavement cafes are part of Seattle's new urban life.**



**It must be fun to work in the groups which define, measure, test and evaluate the new indicators which mark out Seattle's way towards a sustainable society. Because this involves a lot of work.**

the University of Washington State in Seattle, *Gary Lawrence*, tells me when I meet him during a short visit he makes to Stockholm.

**The "ownership" of problems**

People are quite good at finding solutions to problems when they feel that these are their problems. If we can give them an opportunity to make their own interpretation of the information on pollution and the consequences that this has for their own lives, we give them an "ownership" over these problems, says Gary Lawrence.

In Seattle a voluntary citizens' organisation has developed *indicators for sustainability* which complement the town's planning and budgetary services by measuring development towards or away from a desirable future, rather than measuring what progress is made towards an absolute final goal. These people received measured data and themselves decided what these meant for them. They created indicators through which they can see whether the things which really concern them are getting better or worse. They are now using their indicators to hold themselves and their institutions responsible for taking action in order to enhance sustainability in the community.

As so many times before in the US, this has its origins in private initiatives. A small group of people started *Sustainable Seattle* as far back as in 1991. Since then the group has grown and has become a citizen's movement in Seattle. People in Seattle took matters into their own hands and developed a set of indicators for a sustainable community, with reference to economy, the environment and social issues.



**Street environments with walking routes and dwellings which face onto the street are planned in Seattle.**

Sustainable Seattle gradually developed forty indicators. These are to measure not only things but must also describe where the community is heading, in a way that compels individuals to take action.

**No sustainable future without the will of the inhabitants**

There are now a number of projects and programmes in Seattle which, taken together, show a dramatic change to a more sustainability oriented planning, budgetary and decision making process. One example is the structure plan in Seattle called *Urban Village Strategy*. This is based on the assumption that there is no sustainable future for the city unless the individuals in the community choose to take this road. The plan therefore endeavours to make changes in behaviour easier and more attractive. People receive proposals for alternative solutions for e.g. transport which causes less damage to the environment and at the same time appeals to their deepest values. The plan affects the market in such a

way that it is cheaper to do things that are better for the sustainability of the community and more expensive to do things that cause damage.

**Increased development density, walking routes**

Increased development density, walking routes and flexible public transport are things that are given preference.

- We increase the number of workplaces and dwellings in the urban areas. Dwellings are placed above shops on the ground floor, and face the street and walking routes rather than the back yard. We increase public expenditure in the basic infrastructure of the urban areas so that it is easier for activities to move there and become profitable. In order to carry all this through, an office was recently opened in Seattle City Hall. Around fifteen people work there, and their job is to support neighbourhood planning which is in line with the intentions of the structure plan.





**Seattle is a typical American city with a compact city centre surrounded by extensive built-up areas. Owing to its position between the sea and the mountains, its inhabitants are near large natural areas.**

PHOTOGRAPH: BENGT AF GEIJERSTAM/BILDHuset

### **This is how indicators are chosen**

I ask Gary Lawrence for a list of the indicators which are now used in Seattle. He answers however that the list for Seattle is quite certainly not right for any other community. Each community must find its own indicators. He gives me some advice on how to go about this:

- \* Ensure that the measurement indicators you use have both an emotional and a scientific basis. In every community there are things that are important for the people there. Try to find ways that associate what is being measured with what people are really concerned about.
- \* Answer the question "what" before you try to answer to the question "how". What is it that you want to achieve? In this way it is easier to find what are the value judgments of those whose actions are necessary for the measures to be carried out.

- \* Realise that sustainability is a political and not a technical option. The pivotal issue in a sustainable community are the choices which the individuals and households make as to how they want to live their lives.
- \* Realise that good planning has both a moral and a technical basis. Planning concerns people's lives, and plans are made not only for those alive today but also for those who come after us.
- \* Develop ways in which people's self interests can be used for the benefit of the community, rather than devote all your efforts to trying to change people's self interests. Make it lucrative to care for the environment. ■

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## **Recycling of sewerage**

### **Environmental impact assessment applied to alternative sewerage systems at Bergsjön and Hamburgsund**

(in Swedish)  
Majlis Stenberg,  
Ann-Karin Andersson,  
Erik Kärrman

In the Ecoguide project, two alternative natural sewerage systems were compared with existing sewerage systems in two municipalities. The evaluations took the form of environmental impact assessments in accordance with the Environmental Protection Act. Different aspects were evaluated according to the system conditions in "The natural stage" and regional environmental goals. The results show that separation at source of urine, faecal matter, dishwasher and laundry water may be more advantageous than



**Essential construction.**

PHOTOGRAPH: M NORDAHL

conventional handling of mixed waste water. ■

Report No 1996:1, Sanitary Engineering, Chalmers University of Technology, tel +46 31-772 21 21, fax +46 31-772 21 28 (163 pp, SEK 200). ISSN 1401-1859

### **Life Cycle Assessment of Waste Water Systems at Bergsjön and Hamburgsund**

Interim reports from the Ecoguide project, (in Swedish), Anne-Marie Tillman, Henrik Lundström, Mikael Svingby. Reports Nos 1996:1 and 1996:1b (data appendix), Technical Environmental Planning, Chalmers University of Technology, tel +46 31-772 10 00, fax +46 31-772 21 72. ISSN 1400-9560

### **Urine separating wastewater system of the ecological village Björnsbyn, Luleå**

(in Swedish)  
Eva Lehto, Anne Hauser

The ecological village at Björnsbyn has gone in for urine separating lavatories with tanks in which the urine is stored for use as fertiliser. Faecal matter and domestic wastewater are treated in a sedimentation tank. The sludge is converted into compost which after dewatering receives final treatment in a percolation plant before being used as composted soil in the village. The lavatories have not worked particularly well, however, and need further development. ■

Report No 1996:09T, Environmental Planning and Design, HLU, tel +46 920-91 446, fax +46 920-91 697 (42 pp, SEK 188). ISSN 0349-3571

### **Systems for urine separation. Survey, evaluation and laboratory tests**

(in Swedish)  
Åsa Hanaeus,  
Erica Johansson

A survey has been made of major urine separating sewerage systems in Sweden. By the spring of 1996, eleven such installations were in operation. The systems work well in spite of problems with some components.

An evaluation has also been made of urine separating sewerage system at Björnsbyn ecovillage in Luleå. Samples taken from the storage tanks for urine show that water is leaking into the system.

Experiments on storing urine at laboratory scale are described. ■

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