Survey Study for Effective Utilization of Sewerage Resources in Shiga Prefecture		
Whole term	**2001.9 - 2003.3**	

(Purpose)

Currently, the River-basin-sewerage project which consists of 4 treatment divisions in the Shiga prefecture by making the water quality conservation of Lake Biwa, a living-environment improvement, etc. into a main purpose since it decided upon the "Lake Biwa circumference River-basin-sewerage master plan" in Showa 46. In addition, the maintenance of an independent public-sewerage project, a wastewater-from-agricultural-villages project, etc. has been carried out. The sewerage service percentage exceeded 69.5%, at the end of the 2001 fiscal year and active project support is performed to the percentage to 85% in 2010.

On the other hand, more effective investment in the infrastructure improvement project, the production of society of a cyclical form, good preservation and generation of water cycle, safe and stable water-source reservation, etc. are going to be considered for changing of the latest social consciousness from the water management containing sewerage.

Sewerage in Shiga are reevaluated as the master plan of sewerage under such circumstances from the view point of Lake Biwa, the prefecture people and river basins.

The main sewerage previous projects were summarized and the basic measure like software for promoting this project has been searched. This project intends to contribute master plan formation focusing on "comprehensive plan for sludge treatment".

(Result)

(1) Comprehensive plan for sludge treatment

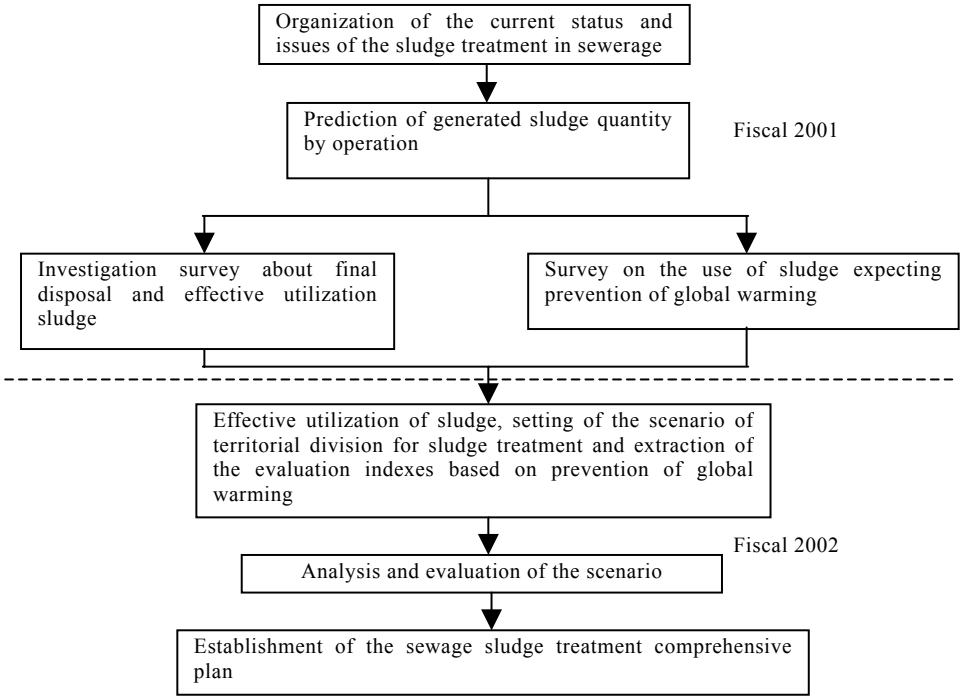
- Analyze the present condition and the issue of sewage sludge treatment in this prefecture. The amount of influents and the amount of generating sludge were predicted according to the project by using the Shiga sewerage-maintenance program (2000) etc.
  Calculate the global-warming-gases from sewage-treatment-plant, the survey on the sludge effective-utilization method for prevention of global warming was conducted. Scenario setup according to sludge-treatment area were performed , and the evaluation indicator was extracted.
- The sewage-sludge treatment comprehensive plan was established by using indicators on simple control/risk management, cost, and effects to global warming.

(2) Recycle vision of treated water

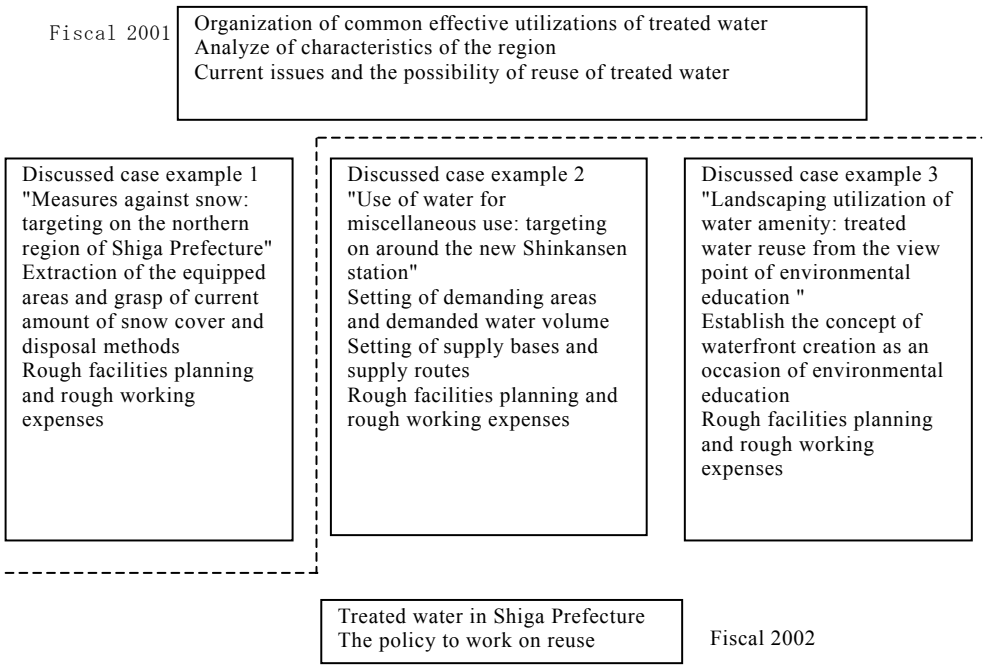
- Understanding of a general treated water effective utilization
  The characteristic and the issue which a treated-wastewater reuse obtains were arranged, and the possibility of the treated water reuse was adjusted in consideration of the local characteristic of the Shiga prefecture.
- Case examination: "Measures for snow"
  The Area for examination was extracted and examination of rough facilities planning and rough working expenses and comparison the examination with other alternatives was performed.
- Case examination: "Use of water-for-miscellaneous-use"
  The areas expected as use of water-for-miscellaneous-use were selected, and the contribution to an economic efficiency, water quality, and a recycling society, etc were evaluated.
- Case examination: "Landscaping utilization of water amenity"
  The treated water reuse was considered from the view point of environmental education.
- The future plan of the treated water reuse was proposed in the Shiga prefecture.

(3) Networked design

- The issue currently held by the joint treatment facilities was extracted on the assumption that the network between adjoining 2 treatment plants.
- The functional allocation was aimed that an issue should be solved, the allocation effect was evaluated, and the network design was summarized.



Discussion flowchart about sludge treatment comprehensive plan



The discussed contents of treated water: recycle vision

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Key words	Comprehensive plan for sludge treatment, Effective utilization of sludge, Treated water reuse