

Effective Sewerage System Construction and Implementation Measures

効率的な下水道整備と事業実施方法



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Public wastewater treatment works in Japan include the construction of public sewerage systems, rural sewerage projects, and domestic wastewater treatment tank projects. To select the most practical measure that fits local conditions, such as geographical features and population density, each prefecture designs a Prefectural Plan for Appropriate Wastewater Treatment ("Prefectural Plan").

日本における公共的な汚水処理事業には、公共下水道のほか、農・漁業集落排水事業、合併処理浄化槽事業等があります。地理的特性や人口密度などに照らし、地域実情に合う適切な実施方法を選定するため、各都道府県では「都道府県構想(全県域汚水適正処理構想)」を策定しています。

Public Sewerage Systems

公共下水道



Public sewerage systems collect and treat wastewater discharged from every household through sewer pipes. These systems are managed by municipalities, mainly in urbanized areas. A system that includes a wastewater treatment plant is called an "independent public sewerage system," while a system that is connected to a regional sewerage system is called "public sewerage connected to a regional sewerage system."

Public sewerage systems that are implemented outside urbanized areas are specified as specific environmental protection sewerage systems, and systems that mainly treat wastewater from specified factories are called specific industrial waste control sewerage systems. These systems are differentiated from the public sewerage systems.

主として市街地の中で各家庭から排出される汚水を下水道管きよにより排除し、処理するために市町村が管理する下水道です。下水処理場を有するものを単独公共下水道、流域下水道に接続するものを流域関連公共下水道と呼んでいます。

なお、公共下水道のうち、市街化区域以外で行われるものを特定環境保全公共下水道といい、特定の事業活動による汚水が大半を占めるものを特定公共下水道として区別しています。

Regional Sewerage Systems

流域下水道

This system is constructed in an area that covers more than one municipality to protect water quality efficiently in lakes and oceans. In constructing a regional sewer system, the prefectural government builds trunk sewer pipes and a wastewater treatment plant while sewer pipes that collect wastewater from each household and businesses are installed by local authorities as "public sewerage connected to a regional sewerage system". The prefecture and municipalities carry out the maintenance and management of each facility.

川や湖などの水質保全を効率的に行うために、二以上の市町村の区域を一體的に整備する下水道システムです。都道府県が幹線の管きよと処理場を造り、市町村が流域関連公共下水道として各家庭や事業場の排水を集める管きよを整備します。維持管理は都道府県と市町村がそれぞれ行います。



Comparison between Public Sewerage Systems and other Wastewater Treatment Systems

下水道とその他の污水处理施設の比較

In addition to public sewerage systems, there are other types of wastewater treatment systems, including rural sewerage projects and domestic wastewater treatment tank projects. The total coverage rate of these three systems in fiscal 2000 was 71.2%. Depending on regional characteristics, the most suitable system for each area is selected to maximize efficiency. The coverage rate of flush toilets in fiscal 2000 was 90.8%. Coverage rate of flush toilets=number of people with a flush toilet (those with a domestic wastewater treatment tank excluded)/population in the treatment area.

污水处理には、下水道のほかにも農・漁業集落排水事業、合併浄化槽事業などがあり、それぞれに特色を有しています。これらを合わせた2000年度の普及率は71.2%となっています。このため、効率的な整備を行う観点から地域の特性に応じて適切に役割分担を行っています。また2000年度の水洗化率は90.8%となっています。水洗化率=水洗化人口(浄化槽による水洗化人口を除く)/処理区域内人口。

Type of System 事業名	Public sewerage system Specific environmental protection public sewerage system 公共下水道事業 特定環境保全公共下水道事業	Rural sewerage projects 農・漁業集落排水事業	Domestic wastewater treatment tank projects 合併処理浄化槽事業
1. Target area 対象地域	Public sewerage system: Mainly urbanized areas Specific environmental protection public sewerage system: Areas not designated as an urbanized area 公共下水道：主として市街地 特定環境保全公共下水道：市街化区域以外の区域	Agricultural and fishery communities inside an agricultural developing area designated by the Law Concerning the Improvement of Agricultural Developing Areas (Including areas that are considered to be improved along with the concerned area). 農業振興地域の整備に関する法律に基づく農業振興地域(これと一体的に整備することを相当とする区域を含む)内の農・漁業集落	Areas where a miscellaneous wastewater measure or another type of measure is necessary but not included in the area planned for a project plan authorized under Sewage Law. 下水道法の認可を受けた事業計画に定められた予定処理区域以外等の地域で、雑排水対策等を促進する必要がある地域
2. Target population size 対象人口	Public sewerage system: Not specified Specific environmental protection public sewerage system: Between 1,000 and 10,000 (Less than 1,000 is also acceptable) 特定環境保全公共下水道：1,000～10,000人(1,000人以下も可)	As a general rule, the number of households that would benefit should be above 20, and the population should be 1,000 or less. 受益戸数がおおむね20戸以上原則として概ね1,000人以下	Installed into individual households 戸別に設置
3. Coverage rate (as of the end of fiscal 2000) 普及率(H.12年度末)	62% 78.03 million people 7,803万人	2.0%* 2.59 million people 259万人	7.2% 9.14 million people (including those who installed tanks privately) 914万人(個人設置を含む)

* Fishery community sewerage systems, forestry community sewerage systems, and primary sewerage facilities are included.
* 漁業集落排水事業、林業集落排水事業、簡易排水施設を含む

Source: Sewage Works in Japan 2001
出典：2001年日本の下水道