

Usui Second (Pumping and Drainage Pump) Station

This pump station combines the function to supply the agricultural water developed in 1968 under the National Project for Development of Inbanuma with another function to pump out the water discharged from the drainage area into the Inbanuma Lake.

Pump capacity

| | | | | |
|-----------------|-------------------------------------|-----------------------------|--|------------------------|
| Pumping pump | 300 mm in pump bore × 2 units | 45 kW in power × 2 units | 0.728 m ³ /S in water volume | 15.0 m in pump head |
| Drainage pump | | | | |
| Emergency pump: | 1,300 mm in pump bore | 220 kW in power | 4.0 m ³ /S in water volume | 3.5 m in pump head |
| Regular pump: | 400 mm in pump bore | 15kW in power | 0.233 m ³ /S in water volume | 3.3 m in pump head |

(Drainage function)

- The water is drained not only from the agricultural land but also from the drain basin with acreage of 451 ha including the urban area in the Usui Station vicinities of Keisei Electric Railway.
- All water discharged from the drainage basin is collected in the waterway (lowland drainage canal) outside of the bank of the Inbanuma. The managed water level in the Inbanuma is YP 2.5 m (irrigation period: May to August). However, the height of the reclaimed land in the vicinities of the Inbanuma is approximately YP 1.0 m to 1.75 m. Moreover, the height of the residential district in the lowest ground is as low as YP 2.16. For this reason, this pump station has maintained the water level of the lowland drainage canal at 1.2 m since it was brought into operation, and thereby protects the area from a flood (see the lateral profile of the area).

☆ Urbanization has advanced in the drainage basin (see the photos on the right). For this reason, a large quantity of water exceeding the pump capacity flows in the lowland drainage canal in a short period of time during rainfall. It not only lowers the level of safety against the flood in the region, but also causes a lot of floating objects (garbage) to drift ashore. This in turn negatively affects the drainage, and it runs into trouble.

☆ This pump station has also been repaired as necessitated. However, more than 30 years have passed since the land development. As a result, deterioration has been in progress, and the maintenance expenses are soaring.

(Feedwater function)

- Centering around this pump station, agricultural water is supplied to the farmlands, especially the rice paddies, that stretch between the Prefectural Highway Inbanuma Road leading to the Great Bridge of Funato (Funatoohashi) on the west and the left side bank of the Kashima River up to the bridge of Keisei Electric Railway spanning the
- ☆ The agricultural water and the rice paddies have a function to produce the agricultural crops such as rice, etc. Moreover, they also have the other functions to nurture the animals clean the water, and present the pleasant and the green landscapes.

Change in appearance of drainage basin

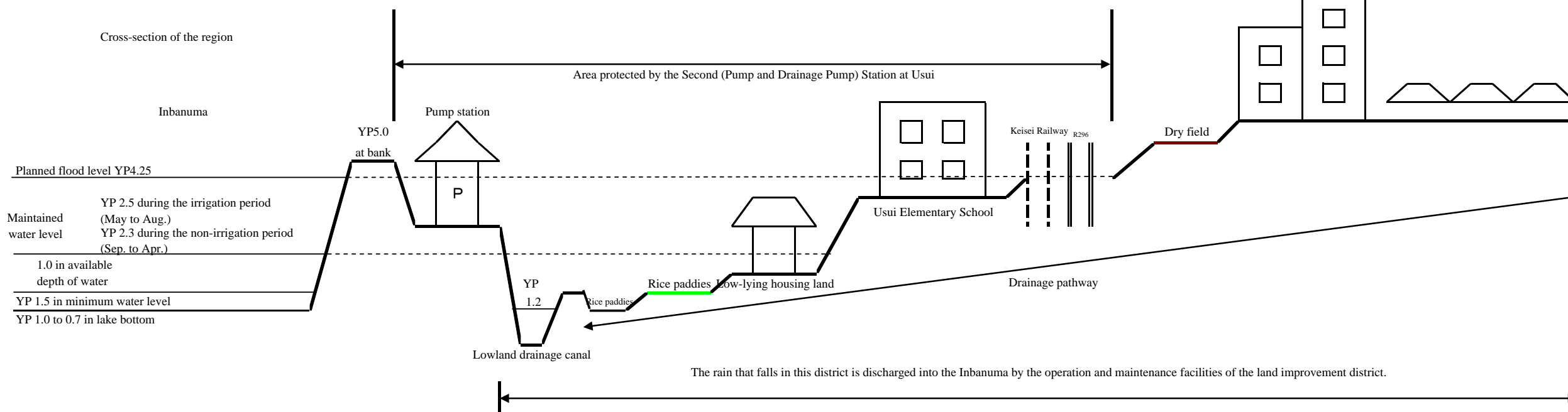


Drainage basin in about 1967



Drainage basin as of today

*YP refers to the height based on the mean sea level in the mouth of the Tonegawa River. It represents the height approximately 84 cm as low as the true height (TP) displayed in the ordinary map.



| Legend | |
|--------|---|
| | Drainage basin |
| | Agricultural land (rice paddies) |
| | Agricultural land of direct drainage (rice paddies) |



Midori Net Inbanuma
(Inbanuma Land Improvement District)
Region Richly Endowed with Nature

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