CONCEPT NOTE

Centre for Creativity and Innovation

Nagpur Institute of Technology

Organizes

A Program on the assessment of wastage of treated water through leaked taps for Nagpur city

In association with

Orange City Water Private Limited (OCW)
Indian Water Works Association (IWWA)

Introduction

Water is becoming a very rare commodity and hence we need to use it carefully, conserve it and preserve it for next generation as we know that water is a finite resource, and in many areas, future water supplies are uncertain. Individuals usually gets aware when there is a drought however, because water is inexpensive, there are often few incentives to reduce water loss. Water has no viable substitute.Citizens and utilities need to consider water conservation programs.

Wastage and leakage of water can occur from the public (mains) system or in the private systems owned by individual customers. While leaks in the public mains system can be minimized by systematic inspection and maintenance by the authority concerned, it is more difficult to trace and remedy leaks on private property. A relatively small (2 millimeters) leak in a service pipe, or a leaked tap, under normal working pressure can waste approximately 50 liters per day (18000 liters in one year).

As per the article published in “The Hindu” on December 15, 2016 as much as 40 per cent of the water being lost due to leaking pipes or taps by 35 per cent to 40 per cent losses, it said about 900 MW of power is lost daily.

As per the Plumbing 18 published in China leaks in the public mains system can be minimized by systematic inspection and maintenance by the authority concerned, it is more difficult to trace and remedy leaks on private property.

As per survey done by U.S. Environmental Protection Agency, fixing even a small leak may save hundreds of gallons of water each month

Water utilities across the United States and elsewhere in North America are saving substantial amounts of water through strategic water-efficiency programs.

Aim

To assess wastage of treated water through leaked taps and provide technology based solutions to avoid this wastage for Nagpur city.

Objectives

- Locate leaks in a utility's distribution system by identifying unaccounted-for blocks of water,
- Identify high use customers, who can be given literature on opportunities for conserving
- Identify areas where use is increasing, which will be helpful in planning additions to the distribution system.

Methodology

How Assessment of wastage of water through leaked taps for Nagpur City will be executed?

- By doing the survey of most of the houses in Nagpur city and search the domestic taps which are leaked.
- The assessment of water wastage will be done by doing a survey of most of the houses in Nagpur city and search the leaked domestic taps. After the assessment, solution for the leaked taps will be provided which is expected to save billion litres of water which is being wasted in Nagpur city on regular basis.
- This will create awareness amongst the people of City about wastage of water and its side effects
- It will also reduce the need for costly water supply and new wastewater treatment facilities

Outcomes

- 1. Awareness among the people of City
- 2. Saves money
- 3. Protects drinking water resources
- 4. Minimizes water pollution and health risks
- 5. Reduces the need for costly water supply and new wastewater treatment facilities

Innovation

How different it is from others or earlier projects?

We are introducing this concept of saving the water which is being wasted by leaked taps first time in India initiated in Nagpur city on primary basis.

Advisory Committee

Organizational Background, including the expertise and experience

Orange City Water Private Limited (OCW)
Indian Water Works Association (IWWA)

Core Members

Complete Contact Information with the name and number of the Contact Person.

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