

## Human Impact on Water Sources as a Result of Environmental Pollution

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### ABSTRACT

The article examines the issues of drinking water supply, disintegration of the composition of drinking water. The effect of man-made impacts on nature has influenced the quality of surface water assets in numerous districts of the Soil, counting within the Republic of Uzbekistan, making them unacceptable for drinking purposes in a few cases.

**KEYWORDS:** water, composition, water supply, source, groundwater, surface water, degree of water mineralization

### Introduction

In spite of the colossal add up to water saves on Soil, in numerous nations of the world water assets are nearly totally utilized, which is able lead to a deficiency of drinking water, which is able be confronted by more than half of the world's populace within the another 20-30 a long time [1].

Water is the most carrier within the common environment of both beneficial and hurtful components and microorganisms. It may be a source of contamination of nourishment items of plant and creature root. Drinking water may be a figure within the living space of microorganisms that have consistent contact with the human body, on the quality of which his wellbeing moreover depends. Giving the populace with drinking water of great quality is of social and sterile significance, because it ensures against illnesses transmitted through water.

### Methods of research

The quality of drinking water depends on the composition of characteristic waters and existing water supply frameworks. Water quality alludes to the characteristics of the composition and properties that decide the reasonableness for the vital sorts of water utilize. Quality criteria are characteristics that are utilized to evaluate water quality.

The issue of drinking water supply influences numerous angles of human society. As of now, this can be a social, political, restorative, geological, as well as building and financial issue.

The errand of giving the populace with clean water is among the needs of the country's advancement, its arrangement makes it conceivable to make strides the quality of life of the populace, anticipate crises related to the working of water supply frameworks.

The method of getting and providing conditioned drinking water to the populace depends on a number of variables, the most of which are: the state of water supply sources, the state of centralized drinking water frameworks, the sterile and specialized condition of water supply systems, the level of research facility control over water quality at all stages of its planning and supply to the populace.

The state of water supply sources. Within the add up to volume of provided water, 68% is possessed by surface supplies. The disintegration of their condition is clarified by a number of reasons, and mainly: a lessening within the yearly stream of streams; inadmissible condition of sanitary security zones, counting steady infringement of the specified administrations in these zones [2].

Seriously contamination of open water bodies, basically by untreated wastewater. With an increment within the populace in cities, wastewater treatment plants built don't have time to filter water up to measures. Since of this, wastewater is released insulant filtered. In spite of the to some degree way better sterile and sterile condition of underground sources in later a long time, their defilement with press, fluorine, bromine, boron, manganese, strontium and other follow components has been watched [4].

Giving humankind with clean drinking water will be the most issue of the XXI century. The affect of man-made impacts on nature has influenced the quality of surface water assets in numerous districts of the Soil, counting within the Republic of Uzbekistan, making them unacceptable for drinking purposes in a few cases. The natural circumstance has weakened strongly, the number of irresistible infections related with the use of low-quality water has increased. Therefore, within the XXI century together with measures pointed at the most extreme conceivable advancement of the natural circumstance, the most consideration will be paid to groundwater as the foremost solid and ensured source of drinking water supply.

Groundwater makes up a noteworthy portion of the country's water assets and plays an vital part in drinking and rural water supply, counting water system and water system of pastures. The groundwater of the Aral Ocean bowl, counting the domain of Uzbekistan, is shaped due to precipitation, filtration from stores, riverbeds, channels, lakes and inundated regions. The normal assets of groundwater in Uzbekistan as a entire are 24,35 km.

New groundwater is an critical key asset of any state, guaranteeing its compelling and concordant advancement. From this point of see, the prospects of the Republic of Uzbekistan are the foremost favorable. It has considerable saves of both new groundwater of drinking quality and restorative mineral waters. Be that as it may, the degree of their utilize isn't tal sufficient, and mechanical and agrarian contamination of surface and groundwater leads to the debilitating of a few promising stores of new groundwater. To begin with of all, this applies to Western Uzbekistan, where drinking-quality water is right now essentially non-existent.

Subsequently, the most vital assignment in connection to new groundwater for the XXI century is the greatest conservation of investigated stores of new groundwater, their saves, based on competent, profoundly proficient utilize, asset administration, assurance from contamination and consumption, localization of ranges of seriously contamination, manufactured arrangement on promising regions. Groundwater is more often than not characterized by a steady composition and temperature, noteworthy mineralization, nonappearance of mineral suspensions, mo substance of natural substances, nearness of broken down gasses, critical hardness, expanded press and manganese substance, tall sterile unwavering quality [5]. Regularly underground waters have a water powered association with surface waters, which involves a alter in their chemical composition: the concentration of natural substances, silicic corrosive, increments; mineralization changes, broken down oxygen shows up. With expanding profundity of event, the degree of mineralization of water increments. Concurring to O.A. Alekin, groundwater is isolated into:

- concurring to the degree of mineralization: new – up to 1 g/l; brackish – 1-3 g/l; saline – 3-10 g/l; salty – 10-50 g/l;
- by pH esteem: soluble – 11-14; somewhat antacid – 8-10; unbiased – 7; somewhat acidic - 4-6; acidic – 1-3;
- by add up to hardness (mg-eq/l): exceptionally delicate up to 1,5; delicate – 1,5-3; tolerably difficult – 3-6; difficult – 6-9; exceptionally difficult – over 9.

The composition of common waters is continually changing as a result of the forms of oxidation and diminishment happening in them, sedimentation of scattered and colloidal pollutions and salts, as a result of changes in weight and temperature; particle trade between water and foot silt; enhancement of waters with follow components due to biochemical forms; blending of waters of different nourishment.

When utilizing groundwater for drinking water supply, [3]:

- hunt for stores (locales) and aquifers inside them, carried out on the premise of territorial topographical, hydrogeological and geophysical works;
- preparatory investigation, counting getting calculated hydrogeological parameters, choosing a levelheaded water intake conspire, preparatory appraisal of operational groundwater saves within the investigated region;
- point by point investigation, coming full circle in an appraisal of the operational saves of groundwater in

connection to the created plot and plan of the water admissions by categories that guarantee the allotment of capital ventures for the plan and development of the water admissions.

### Conclusion / recommendations

Human financial action altogether influences the state of water sources both subjectively and quantitatively. One of its variables is the flushing of chemical fertilizers from agrarian lands and the release of insulant treated wastewater and water from warm and atomic control plants into supplies. As a result, tiny fish and macrophytes are plan creating, causing abundance of supplies, an increment within the color of water, the appearance of tastes and odors, which declines the sterile condition of water sources.

Hence, when choosing a water treatment innovation, it is essential to decide the quality of the source water, i.e. the composition and concentration of impurities contained in it, and after that compare it with the prerequisites.

### References

- [1] В.С. Алексеев, С.Н. Ильин и др. Совершенствование и развитие водного хозяйства региона. Вологда 2001.
- [2] Фрог Б.Н., Левченко А.П. Водоподготовка: Учебн. пособие для вузов. М. Издательство МГУ, 1996г. 680с.
- [3] Алиев, М. К. Изучение проблемы технического состояния водопроводных сооружений и сетей в условиях Республики Узбекистан и пути их решения / М. К. Алиев, Д. Э. Махмудова // Инновационные технологии в водном, коммунальном хозяйстве и водном транспорте [Электронный ресурс]: материалы II республиканской научно-технической конференции, 28-29 апреля 2022 г. / редкол.: С. В. Харитончик [и др.]. – Минск: БНТУ, 2022. – С. 163-167.
- [4] Rixsixodjaeva, G. R. (2021). CORROSION AND SCALE FORMATION ARE ASSOCIATED WITH THE CHARACTERISTIC FEATURES OF WATER AND METALS. ResearchJet Journal of Analysis and Inventions, 2(12), 71-76.
- [5] Rixsixodjaeva, G. R., & Obidzhonov, A. Z. (2021). The Use of Fresh Groundwater for Various Industrial Needs. European Journal of Research Development and Sustainability, 2(12), 198-199.