

## Changes Detection Assessment of Miankaleh Coastal wetland by Landuse Planning Approach

Soolmaz Dashti<sup>1\*</sup>

Gholam Reza Sabzghabaei<sup>2</sup>

Kaveh Jafarzadeh<sup>3</sup>

Mojgan Bazmara Baleshti<sup>4</sup>

*1. Assistant Professor, Department of Environment, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran*

*2. Assistant Professor, Department of Environment, Behbahan Khatam Alanbia University of Technology, Behbahan, Iran*

*3. Masters Assessment and Land use planning, Behbahan Khatam Alanbia University of Technology, Behbahan, Iran*

*4. Masters Assessment and Land use planning, Behbahan Khatam Alanbia University of Technology, Behbahan, Iran*

**\*Corresponding author:**

Soolmazdashti@iauahvaz.ac.ir

Solmazdashti@gmail.com

Received date: 2017/10/09

Reception date: 2018/05/19

### Abstract

To conserve and manage wetland resources, it is important to inventory and monitor wetlands and their adjacent uplands. Satellite remote sensing has several advantages for monitoring wetland resources. Therefore, in order to implement better management and in order to protect the wisely of Miankaleh wetland, the evaluation and monitoring of the dynamic changes of this wetland using satellite imagery and remote sensing was done. For this purpose, the Landsat images (OLI and ETM sensors) of 15 years' timescale (2001 -2016) provided. After geometric and atmospheric correction of these images, supervised classification with maximum likelihood method was done and these images were classified in to 5 classes Including bayer and wet lands, man making, vegetation, agriculture and aquatic zone. The results showed that there was a wide change in the wetland's area during the 15-year period Due to land use changes and contamination has been caused. During the study period, the aquatic zone has been reduced by 11879 hectares and wetlands with the highest area of 5.52 Percent and vegetation cover with 0.55 Percent of the least increase in area. As a result, due to the process of changes in the level of the wetland, it is necessary to prevent the destruction and destruction of this wetland with proper and integrated management and planning.

**Keywords:** Monitoring Changes, Planning and Management, Supervised Classification, Miankaleh Wetland.