

**Ministry of Emergency Situations  
of the Republic of Kazakhstan**

**Interaction and cooperation in the field of forecasting and  
prevention of floods**



high waters and  
floods



earthquakes



wildfires



Mudflows and  
Avalanches



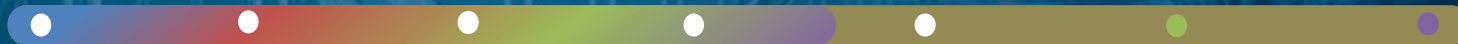
One of the most recurring emergencies is seasonal flooding that threaten 1,048 communities,



Flood forecasting is carried out on the basis of data from Kazhydromet of the Ministry of Ecology and Natural Resources, the frequency and recipients of which are regulated by a joint order of the ministries for emergency situations (dated 19.01.2021 No. 17), ecology, geology and natural resources (dated 27.01.2021 No. 16-p ).

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In addition, as part of the Roadmap for anti-flood measures in 2020, the material and technical base of Kazhydromet was modernized.





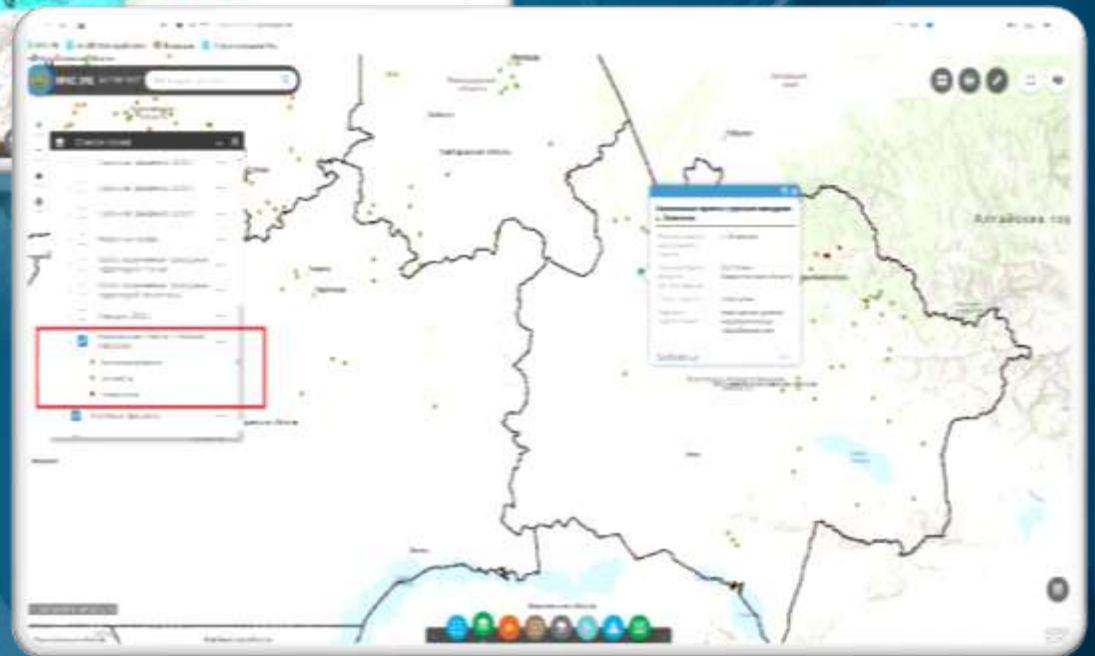
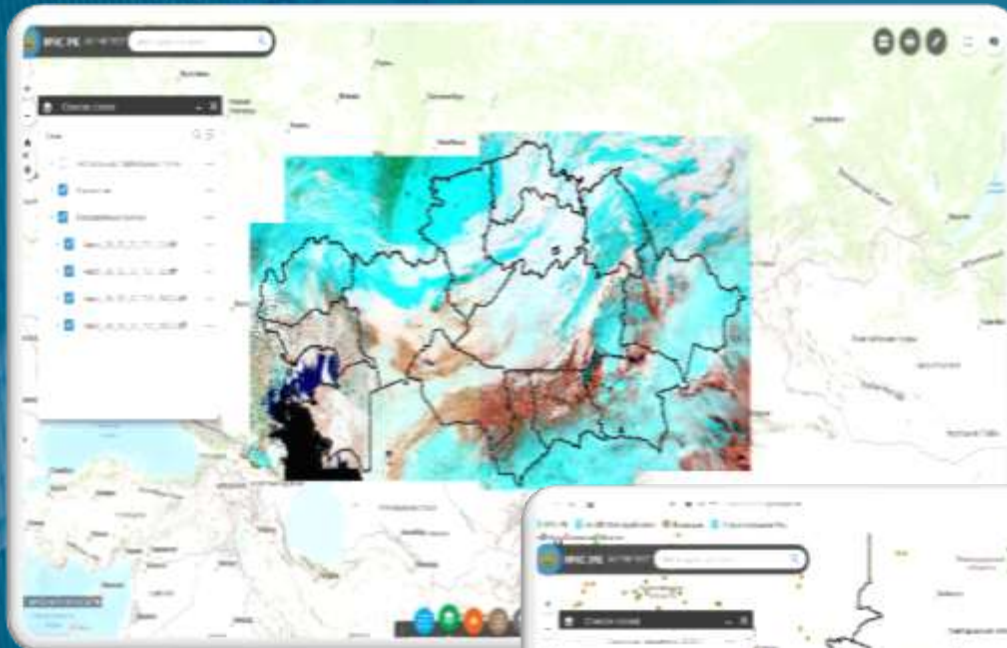
**The forecast of the flood situation was carried out on the basis of hydrological forecasts of Kazhydromet as of February 1 and March 1, 2023**

To calculate the expected water content and timely response to the current situation, the following are determined:

-  catchment areas of lowland river basins
-  accumulated moisture reserves on them (*digital terrain models were used*)
-  soil freezing rates and risks of rising levels
-  data from hydrometeorological services of Kyrgyzstan (basins of the Syrdarya, Chu and Talas rivers) and Russia (Ural river)



The Ministry, within the framework of the state order, received the opportunity for emergency satellite imagery of areas of emergency situations by Kazakh satellites.





Irtys



Syr Darya



Tobol



Yesil



Ural



Chu



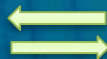
Talas

*Floods depend not only on the natural flow of rivers,  
but also from discharges from  
reservoirs located on the territory*





West-Kazakhstan region



Saratov region



Orenburg region

on the state of the ice cover, filling and discharge of water from the Iriklin, Priuzensky, Varfolomeevsky reservoirs (RF)



Aktobe region



Orenburg region

on the state of the ice cover, filling and discharge of water from the Aktobe and Kargaly reservoirs (RK) on the Ilel and Or rivers (tributaries of the Ural River), the Iriklin reservoir (RF)



Kostanay region



Chelyabinsk region



Kurgan region

on the state of the ice cover, filling and discharge of water from the Verkhnetobolsk and Karatomar reservoirs (RK)



North-Kazakhstan region



Tyumen region

on the accumulation and discharge of water from the Sergeevsky and Petropavlovsk reservoirs (RK)



Pavlodar region



Omsk region

on the state of the ice cover, accumulation and discharge of water during the period of environmental releases from the Shulba reservoir (RK)



Zhambyl region



Talas region

allows to ensure the operation of the system of early warning about the threat and occurrence of emergencies at the Chon-Kapka and Orto-Tokoi reservoirs



Turkestan region



Taskhent region

organized daily exchange of information





The Ministry of Emergency Situations built the Koksarai and Astana counter-regulators, which made it possible to seriously reduce the threat from spring floods on the Syrdarya and Yesil rivers

At the territorial level - within the framework of territorial development programs and plans for engineering work to prepare for the upcoming flood period, resettlement from flood-prone zones is carried out

Direct transfers are allocated from the republican budget to local budgets for the construction of flood protection structures

New reservoirs are being built, work is being organized to determine the owners of ownerless hydraulic structures

### Measures to protect settlements

The development and control of the implementation of the measures of the Roadmap for anti-flood measures for 2021-2023 is being carried out

Осуществляется контроль технического состояния гидротехнических сооружений, проводятся многофакторные обследования технического состояния республиканских гидротехнических сооружений и их ремонт

**Thank you for your attention!**