

# Condition assessment of the Means of Fighting Forest Fires and Economic Efficiency of their Application

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The article is devoted to the evaluation of the effectiveness of the best domestic methods and technologies and means of detection, control and extinguishing forest fires in Russia. In the course of the study, a comparative assessment of the accumulated new technological solutions and experimental samples in the production practice was made and the criteria for selecting the best of them were proposed. More than 6 subjects of the Russian Federation were taken as an example, in which promising technological and technical solutions were chosen by expert means. 12 new successful practices were chosen and on their example the forecast of development of perspective technologies of detection, management and suppression of forest fires was made. Market analysis of methods and technologies, as well as means of detection, management and extinguishing forest fires, including a comparative analysis of their economic efficiency, and the economic justification of the proposed solution was made on the basis of these results at this stage of the study to assess the effectiveness of the selected practices. Given the significant difference in forest growth conditions, even within the territory of one subject of the Russian Federation, efficiency was considered as a relative concept, namely, the ratio of the result to the goals pursued, which leads to the degree of implementation of the goals – the more results meet the goals, the higher the efficiency. The payback period of one-time costs was determined simultaneously with the calculation of the economic efficiency of the selected solutions. The adjustment of the key indicator of the state program «development of forestry» for the period 2013-2020 of the subprogram «protection and protection of forests» «the Share of forest fires, liquidated during the first day from the moment of detection, in the total number of forest fires» was made taking into account the calculated level of efficiency. Calculation of costs for the introduction of advanced equipment was carried out in order to assess the effectiveness of decisions.