

Extreme weather events and SiDG

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Climate change is happening and the overwhelming scientific consensus is that extreme weather events *will be* more *severe*, more changeable and more unpredictable. Locally or regionally adapted solutions will have to be developed to achieve the best results in fighting extreme weather events. Managed forests have more chances to survive extreme weather events than unmanaged. The intensity of forest management activities will rise. Forestry operations of SiDG are based on 10 years *FMPs, which are prepared by **SFS. Management activities of SiDG depend on FMPs. SiDG proposals/solutions to mitigate wind damage: 1.) Increase the stability (increase the increment, not the standing volume) and decrease the size of the stock at risk. 2.) Shorter rotations* (stands are harvested before they are exposed to wind risk). 3.) Carefully designed thinning regimes. 4.) Carefully planned fellings in order to minimize the length of exposed edges. Management activities connected to rotation age are driven by environmental and economic considerations, wood market requirements and by wishes of forest manager. 5.) Tree species choice plays a decisive role in stand stability. Especially Norway spruce (*Picea abies*) is known to be sensitive to wind throw on certain areas. One of very important consequence of wind storms is also insect damage (e.g. *Ips typographus* and *Pityogenes chalcographus*). In times of increasing environmental and capital pressures, we can and should implement only forest protection measures that are based on conservation of biodiversity. The forest infrastructure in Slovenia comprises forest roads, skid trails and other structural objects needed for access to the forests and forest exploitation. Due to the extreme weather conditions the construction of new forest infrastructure in Slovenian state forests will be designed and built stronger, with better materials and larger safety factors. The renovation of the existing infrastructure will follow the criteria for new construction and priorities set by SiDG managing board (Robek, 2018).

*FMP – Forest management plan, GGN

**SFS – Slovenian forest service, ZGS

References:

Robek R. (2018). Personal communication.