

# LIFE IS SALACA

ADAPTATION OF WATER FRAMEWORK DIRECTIVE AND HABITATS DIRECTIVE HARMONIZATION AND INTEGRATED ACTIONS FOR FRESHWATER QUALITY IMPROVEMENT IN SALACA RIVER SUB CATCHMENT.

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THE COORDINATOR - THE LATVIAN STATE FOREST RESEARCH INSTITUTE "SILAVA" HAS STARTED EUROPEAN COMMISSION LIFE PROGRAMME FUNDED PROJECT NR. 101114155 – LIFE22-ENV-LV-LIFE IS SALACA AND THE MAIN AIM IS TO ACHIEVE GOOD WATER STATUS OR POTENTIAL AS REQUIRED BY THE WATER FRAMEWORK DIRECTIVE OBJECTIVES AND ATTAIN THE OBJECTIVES OF THE HABITATS DIRECTIVE (HD) AS WELL AS EU BIODIVERSITY STRATEGY, COMPLEX MANAGEMENT ACTIVITIES WILL BE CARRIED OUT IN SALACA RIVER SUB-CATCHMENT:

**1. ADAPTATION OF DIRECTIVE HARMONIZATION ACTIONS IN SALACA RIVER** SUBCATCHMENT BOTH, THE HABITATS DIRECTIVE (HD) AND THE WATER FRAMEWORK DIRECTIVE (WFD), AIM AT ENSURING HEALTHY AQUATIC ECOSYSTEMS WHILE AT THE SAME TIME ENSURING A BALANCE BETWEEN WATER/NATURE PROTECTION AND THE SUSTAINABLE USE OF NATURE'S NATURAL RESOURCES. INDEED THERE ARE MANY SYNERGIES AS THE IMPLEMENTATION OF MEASURES UNDER THE WFD WILL GENERALLY BENEFIT THE OBJECTIVES OF THE HD, AND VICE VERSA. BUT BOTH MENTIONED DIRECTIVES HAVE DIFFERENT APPROACHES. FIRM AND TIMELY COORDINATION BETWEEN WATER AND NATURE CONSERVATION AUTHORITIES IS HIGHLY RECOMMENDED. IT COULD HELP TO SAVE TIME, RESOURCES AND IMPROVE THE QUALITY OF OBTAINED DATA AND EXCHANGE BETWEEN STATE INSTITUTIONS TO REACH A COMMON GOAL - ACHIEVE GOOD WATER STATUS OR POTENTIAL AS REQUIRED BY THE WATER FRAMEWORK DIRECTIVE OBJECTIVES AND ATTAIN THE OBJECTIVES OF THE EU BIODIVERSITY STRATEGY. BUT A CLEARLY DEFINED APPROACH, BY HARMONIZING HD AND WFD IS NEEDED. IN THIS PROJECT A NEW APPROACH FOR ECOLOGICAL QUALITY ASSESSMENT (COMMON VIEW OF HABITAT DIRECTIVE AND WATER FRAMEWORK DIRECTIVE) WILL BE DEVELOPED FOR SALACA RIVER SUBCATCHMENT. GUIDELINES OF HARMONISED HABITAT DIRECTIVE AND WATER FRAMEWORK DIRECTIVE MONITORING NETWORK WILL BE PREPARED BASED ON THE SALACA SUB-CATCHMENT EXAMPLE.

**2. DEVELOPMENT OF N2000 IN NEW FRAMEWORK.** THIS PROJECT WILL USE BEST PRACTICE AND INFORMATION FROM PREVIOUSLY IMPLEMENTED PROJECTS AS WELL AS RESULTS AND INFORMATION FROM WFD AND HD HARMONIZATION APPROACH AND TESTED NEW MANAGEMENT METHODS TO CREATE NEW AND INTEGRATED NATURA 2000 SITE MANAGEMENT PLAN, THAT WILL SERVE BASIS NOT JUST FOR PROTECTING SPECIES AND HABITATS OF EU IMPORTANCE, BUT WILL CONTAIN MANAGEMENT ACTIVITIES NECESSARY TO IMPLEMENT WFD MEASURES, REGULATE TOURISM PRESSURES, ENSURE ECOSYSTEM SERVICES, ETC. IT SHOULD BE EMPHASIZED THAT NATURA 2000 SITES MANAGEMENT PLANS ARE CONSIDERED AS DIRECT CONSERVATION ACTIVITIES, BECAUSE IN RELATION TO THE FOCUSED AND COUNTRYWIDE IMPLEMENTATION OF NATURE MANAGEMENT MEASURES IN LATVIA, SUCH PLANS ARE A PREREQUISITE FOR SUPPORT FROM DIFFERENT FINANCIAL INSTRUMENTS. THE TESTING PHASE FOR NATURE PROTECTION PLANS, USING THE FRAMEWORK OF THE NEW PLANS, WILL TAKE PLACE WITHIN THE PROJECT LIFE IP "LATVIANATURE" IN 2023-2025, AND THIS APPROACH WILL BE USED FOR NATURE PARK "SALACAS IELEJA", TOO.

**3. IMPROVEMENT OF ACCESSIBILITY, QUANTITY AND QUALITY OF HABITATS FOR ECOLOGICALLY VULNERABLE FISH SPECIES.** NATURAL, UNALTERED RIVERS ARE LISTED IN ANNEX I OF EU HABITATS DIRECTIVE AS "WATER COURSES OF PLAIN TO MONTANE LEVELS, WITH SUBMERGED OR FLOATING VEGETATION OF RANUNCULION FLUITANTIS AND CALLITRICHON-BATRACHION (LOW WATER LEVEL DURING SUMMER) OR AQUATIC MOSSES" (HABITAT TYPE CODE 3260). ACCORDING TO ARTICLE 17 (HB) REPORT FOR TIME PERIOD 2013-2018 CONSERVATION STATUS OF THIS HABITAT IN LATVIA HAS BEEN EVALUATED AS POOR, BUT IN THE ALL BIOGEOGRAPHICAL BOREAL REGION, WHICH INCLUDES LATVIA - IT IS BAD. POOR CONSERVATION STATUS MEANS THAT HABITAT IS IN A SITUATION WHERE A CHANGE IN MANAGEMENT OR POLICY IS REQUIRED TO RETURN THE HABITAT TO FAVORABLE STATUS, BUT THERE IS NO DANGER OF DISAPPEARANCE IN THE FORESEEABLE FUTURE, BUT BAD - HABITAT IS IN SERIOUS DANGER OF DISAPPEARING (AT LEAST REGIONALLY). EXCESSIVE EUTROPHICATION AND SEDIMENTATION OF FINE MATERIAL IS ONE OF THE MOST IMPORTANT FACTORS DECREASING THE QUALITY AND TO SOME EXTENT ALSO THE QUANTITY OF HABITATS OF ECOLOGICALLY VULNERABLE FISH SPECIES. GUIDELINES OF HABITAT IMPROVEMENT PREPARED WITHIN THIS PROJECT WITH RELATIVELY SMALL EFFORT CAN BE ADAPTED FOR USE IN OTHER LATVIAN SALMON RIVERS (GAUJA, VENTA, IRBE, ETC). RESULTS AND GUIDELINES ELABORATED WITHIN LIFE IS SALACA AND WAY OF IMPLEMENTATION OF THIS PROJECT ITSELF WILL FACILITATE A MORE SOPHISTICATED APPROACH TO PLANNING AND IMPLEMENTATION OF FUTURE RIVER RESTORATION PROJECTS IN LATVIA AND THEREFORE WILL INCREASE THEIR EFFICIENCY AND POSITIVE EFFECT.

**4. RIPARIAN FOREST MANAGEMENT** THE LAW ON BUFFER ZONES DEFINES THE PRINCIPLES (MOSTLY PROHIBITING) OF HOW TO MANAGE RIPARIAN FORESTS TO PREVENT THE DEVELOPMENT OF EROSION PROCESSES, HOWEVER, WHEN MANAGING ACCORDING TO THE EXISTING PRINCIPLES, THOUSANDS OF M3 OF SEDIMENTS GET INTO THE RIVERS EVERY YEAR, WHICH SETTLE IN THE HABITATS OF FAST-FLOWING STREAMS AND CONTRIBUTE TO THEIR RAPID EUTROPHICATION. FOREST STANDS HAVE REACHED THEIR POTENTIAL AND CAN NO LONGER ABSORB NUTRIENTS AND NITROGEN AS SUCCESSFULLY AS PLANNED. FOLLOWING THE EXISTING PRINCIPLES, THE VALUE OF ECOSYSTEM SERVICES IS REDUCED, WATERCOURSES ARE POLLUTED WITH SEDIMENTS, AND THEY LOSE THEIR WATER SELF-PURIFICATION FUNCTIONS. THE AIM OF THE PROJECT IS TO SHOW AND DEMONSTRATE A NEW WAY OF MANAGING RIPARIAN FORESTS, SEQUESTERING NUTRIENTS AND NITROGEN, AS WELL AS REDUCING EUTROPHICATION. THIS CAN BE DONE BY OPTIMAL SELECTION OF TREE SPECIES COMPOSITION IN THE FOREST STAND, WHICH WILL POSITIVELY AFFECT AND INCREASE THE DIVERSITY OF VEGETATION IN THE FOREST STAND.

**5. APPLICATION OF ECOSYSTEM SERVICE VALUATION** IN LAND USE MODELING THE RIVERINE ECOSYSTEM SERVICES INCLUDE THOSE PROVIDED BY RIVERS AS WELL AS THE BROADER LANDSCAPES THAT ARE HYDROLOGICALLY CONNECTED TO RIVERS (HANNA ET AL., 2018). THE VITAL ECOSYSTEM SERVICES PROVIDED BY THE SALACA RIVER VALLEY INCLUDES FISH RESOURCES AND TIMBER FROM THE CATEGORY OF PROVISIONING SERVICES; A VARIETY OF REGULATING SERVICES AMONG WHICH THE MOST ESSENTIAL ARE REGULATION OF FRESHWATER QUALITY, EROSION CONTROL, FILTRATION AND ACCUMULATION OF NUTRIENTS AND HABITAT PROVISION; AS WELL AS THE WHOLE ARRAY OF CULTURAL SERVICES, INCLUDING RECREATIONAL OPPORTUNITIES AS WELL AS AESTHETIC, HERITAGE, SCIENTIFIC, EDUCATIONAL, AND SPIRITUAL VALUE. THE ABOVE DESCRIBED INSUFFICIENT BIOLOGICAL QUALITY OF THE SALACA RIVER AND ITS TRIBUTARIES, AND PARTICULARLY THE POOR CONSERVATION STATUS OF THE FRESHWATER HABITAT TYPE 3260 IS REDUCING THE POTENTIAL OF THE RIVER ECOSYSTEM TO ENSURE PROVISIONING SERVICE - FISH RESOURCES AND RELATED RECREATIONAL ACTIVITIES AS WELL AS REDUCING THE WATER PURIFICATION CAPACITY OF THE RAPID FLOWING RIVER STRETCHES. INAPPROPRIATE FOREST MANAGEMENT ON THE SLOPES OF THE RIVER VALLEY IS REDUCING THE CAPACITY OF THE ECOSYSTEM TO FILTRATE AND SEQUESTER THE NUTRIENTS AND TO ENSURE THE EROSION CONTROL, THUS CONTRIBUTING TO DETERIORATION OF THE WATER QUALITY IN THE SALACA RIVER VALLEY.

THE IMPROVED KNOWLEDGE ABOUT THE ECOSYSTEM SERVICE SUPPLY IN THE SALACA RIVER VALLEY AND THE IMPACTS OF THE MANAGEMENT PRACTICES APPLIED ON THE SLOPES OF THE RIVER VALLEY AS WELL AS RESTORATION ACTIVITIES WITHIN THE RIVER IS ESSENTIAL TO ENSURE SUSTAINABLE MANAGEMENT OF THE SALACA RIVER VALLEY AND ACHIEVEMENT OF THE OBJECTIVES SET BY THE WFD, THE HABITATS DIRECTIVE AS WELL AS THE EU BIODIVERSITY STRATEGY 2030.

## PROJECT PARTNERS



Valsts reģionālās  
attīstības aģentūra



THE DURATION OF THE PROJECT IS 5 (FIVE) YEARS AND  
THE IMPLEMENTATION PERIOD OF THE PROJECT IS FROM 01.10.2023 TO 30.09.2028.  
THE TOTAL BUDGET OF THE PROJECT IS EUR 5,754,798.12, WHICH CONSISTS OF THE  
AMOUNT OF THE EUROPEAN COMMISSION'S FINANCIAL CONTRIBUTION - EUR 3,452,878.88,  
THE AMOUNT OF LATVIAN NATIONAL CO-FINANCING - EUR 1,866,957.61 AND PROJECT PARTNERS CO-FINANCING - EUR 434,961.63.