

Les Pays Membres Icold Cigb Org

The present Bulletin presents a complete response from the 'Technical Committee of ICOLD on Dams and Water Transfer (CDWT)' to the Terms of Reference. It starts with related global information, brings out related efforts made in countries with completely differing climate, economy, population distribution etc. about present status within and between river basins & countries - both surplus and or deficit, while recognizing the crucial role played by dams in water transfer to needy regions. It then enumerates guidelines followed in considering various options, while identifying geographical issues, limited by political territories & legal issues like water treaties. Essentially then, it dwells on possible need, potential and problems in water transfers that must be handled to overcome B/C issues faced by needy countries. In order to assist concerned professionals, the Bulletin finally elaborates on objections raised by different stake-holders in the subject and provides answers generated globally. The on-going debate world-over about WRD versus environmental impacts is then dealt with to help Member-countries overcome various issues. Le présent Bulletin présente une réponse complète du « Comité Technique sur les barrages et les transferts d'eau ». Il commence par des informations mondiales, fait ressortir les efforts déployés dans des pays au climat, à l'économie, à la répartition de la population, etc. complètement différents sur l'état actuel au sein et entre les bassins fluviaux et les pays - à la fois excédentaire et / ou déficitaire, tout en reconnaissant le rôle crucial joué par les barrages dans le transfert d'eau vers les régions nécessiteuses. Il énumère ensuite les lignes directrices suivies pour considérer diverses options, tout en identifiant les problèmes géographiques, limités par les territoires politiques et les questions juridiques comme les traités sur l'eau. Essentiellement, il s'attarde donc sur les besoins, le potentiel et les problèmes possibles des transferts d'eau qui doivent être traités pour surmonter les problèmes auxquels sont confrontés les pays dans le besoin. Afin d'aider les professionnels concernés, le Bulletin élabore enfin les objections soulevées par les différents acteurs du sujet et apporte des réponses générées globalement. Le débat en cours dans le monde entier par rapport aux impacts environnementaux est ensuite traité pour aider les pays membres à surmonter divers problèmes.

ICOLD Bulletin 150, Cutoffs for Dams, discusses foundation treatment methods using cutoff-type barriers. High emphasis is given to alluvial deposits throughout this document; however, different materials may require cutoff. The construction of cutoffs has made significant advances mainly through the development of more powerful machinery for drilling and excavation, but also through

the introduction of new concepts and techniques, such as jet grouting and deep soil mixing. The following types of cutoffs are presented in this Bulletin: - Diaphragm walls - Vib walls - Pile walls - Superimposed concreted galleries - Jet grouting - Deep mixing These methods are described, and the practical application of each method is illustrated by selected case histories. These case histories also demonstrate how certain difficulties specific to a particular dam site have been dealt with. The performance of cutoffs should be monitored so that their efficiency in reducing flow and piezometric head can be evaluated. Piezometers installed in the foundation upstream and downstream of the cutoff are needed to meet this objective.

The United Nations world water development report 2019

Guidelines

Unlocking the Employment Potential in the Middle East and North Africa

Mathematical Modelling of Sediment Transport and Deposition in Reservoirs - Guidelines and Case Studies / Modélisation Mathématique du Transport et des Dépôts de Sédiments dans les Réservoirs - Lignes Directrices et Études de Cas

Registre Mondial Des Barrages--deuxième Mise a Jour, 31 Déc. 1977

Actas Y Memorias ... Congreso de Grandes Presas

This bulletin 178, Operation of Hydraulic Structures of Dams, is an update of Bulletin 49A (1986), which was the second edition of Bulletin 49 (1984). The current update was prepared using developments and progress made in the last 30 years with operation equipment, staff building and training, and regulatory requirements. Bulletin 178 addresses the need for safe reservoir discharge under a variety of conditions, the dam operator's staffing, evaluation (inspection) of the condition of operating equipment, and operation during unusual or extreme conditions. The operation during unusual or extreme conditions is generally focused on flood and the current abilities to predict significant precipitation events, monitor the flood approach and impact, and communicate and implement the actions needed for safe operation. An annex is provided with seven case studies that provide relevant histories for the subject matter. Ce Bulletin 178 est une mise à jour du Bulletin 49A (1986) qui était la deuxième édition du Bulletin 49 (1984). Cette mise à jour a été préparée en considérant les développements et les progrès réalisés au cours des 30 dernières années sur l'équipement d'exploitation, la constitution des équipes, la formation du personnel ainsi que les exigences réglementaires. Le bulletin traite de la nécessité d'un déversement sécuritaire du réservoir dans diverses conditions, de la dotation en personnel de l'exploitant du barrage, de l'évaluation (inspection) de l'état de l'équipement d'exploitation et de l'exploitation dans des conditions inhabituelles ou extrêmes. L'opération dans des conditions inhabituelles ou extrêmes est généralement axée sur les crues et la capacité actuelle de prévoir les précipitations importantes, afin de surveiller l'approche et

l'impact des inondations, de communiquer avec le public pour mettre en œuvre les mesures nécessaires à une exploitation sécuritaire. Une annexe présente sept études de cas qui fournissent des antécédents pertinents pour le sujet.

Dam decommissioning or dam removal has been increasingly common since the past decade. The reason for considering dam removal may have to do with the safety of dams, high repair costs, high operating and maintenance costs, or effects on fish passage and water quality. However, the decision to remove a dam must be based on careful evaluation of the alternatives to address the specific problem at each dam. The ICOLD Committee for decommissioning dams was established in 2005 to develop information that can be used by ICOLD members to respond to questions about the dismantling of dams and to provide a forum for the exchange of information. This ICOLD Bulletin is not intended as a design guide, but as a guide to the decision making process, consultation and regulatory approvals, design and construction issues, sediment management and performance monitoring. The primary aim of these Dam decommissioning guidelines is to provide dam owners, dam engineers and other professionals with the information needed to guide decision making when considering dam dismantling as a project alternative. They are not meant to be used as a design guide, but as a guide to highlighting the points of interest. The guidelines in this ICOLD Bulletin apply only to flood defense structures and not to fall dams.

Manual on Tailings Dams and Dumps

Sustainable and Safe Dams Around the World / Un monde de barrages durables et sécuritaires

Register

Safety of Existing Dams

Rapports Préliminaires

Operation of Hydraulic Structures of Dams / Exploitation des Structures Hydrauliques de Barrages

This volume considers the ways in which educational research is being shaped by policy across the globe. Policy effects on research are increasingly influential, as policies in and beyond education drive the formation of a knowledge-based economy by supporting increased international competitiveness through more effective, evidence-based interventions in schooling, education and training systems. What consequences does this increased steering have for research in education? How do transnational agencies make their influence felt on educational research? How do national systems and traditions of educational research - and relations with policy - respond to these new pressures? What effects does it have on the quality of research and on the freedom of researchers to pursue their own agendas? The 2006 volume of the World Yearbook of Education explores these issues, focusing on three key themes: globalising policy and research in education steering education research in national contexts global-local politics of education research. The 2006 volume has a truly global reach, incorporating

transnational policy perspectives from the OECD and the European Commission, alongside national cases from across the world in contrasting contexts that include North and South America, Canada, France, Singapore, China, Russia and New Zealand. The range of contributions reflect how pervasive these developments are, how much is new in this situation and to what extent evidence-based policy pressures on research in education build on past relationships between education and policy. This book considers the impact of the steering processes on the work and identities of individual researchers and considers how research can be organised to play a more active role in the politics of the knowledge economy and learning society.

Since the publication of *The Migrations of Fish* by Prof. Alexander Meek in 1916, a number of books have been published on this subject. However, most of these books only cover one type of migratory mechanisms. This book aims to overcome this drawback by presenting a comprehensive coverage of all life history strategies—potadromy, anadromy, catadromy, amphidromy and oceanodromy in one book. The first section of this book reviews the history of fish migration studies, the main definitions and concepts related with fish migration and the main trends and challenges of fish migration research. The second section describes the main processes and patterns associated with all migratory life history strategies, as well as the main problems associated with their conservation. Finally, the third section provides examples of the main methodologies used to study fish migration. This book was conceived with the objective to provide undergraduate and graduate students and researchers with a comprehensive book on which they could rely.

ICOLD Dam Decommissioning - Guidelines

Registre Mondial Des Barrages

World Register of Dams: United States of America

L'énergie hydraulique et l'énergie éolienne

Eau, énergie, air

Compendium of Dam Symbols

As reservoir sedimentation has proven to be a serious problem in South Africa, research in this field has been ongoing for more than 70 years. This publication emanates from extensive research which has been undertaken over the past 30 years with the support of the South African Department of Water and Sanitation as well as the South African Water Research Commission. A great deal of information has fortunately also been obtained from China. Given the universal nature of hydraulic formulae it is not surprising, yet gratifying, that Chinese and South African data generally conform to the same mathematical relationships. This indicates that these relationships should be applicable in other countries as well. Much of the information contained

here has been condensed from a more comprehensive publication. This ICOLD Bulletin follows on Bulletin 115 "Dealing with reservoir sedimentation", which gave guidelines for management of reservoirs to limit sedimentation. The guidelines on mathematical modelling of sediment transport dynamics in reservoirs in this document can be used during the planning and design of new dams, as well as for the management of existing dams. Comme la sédimentation dans les réservoirs s'est avérée être un problème sérieux en Afrique du Sud, la recherche dans ce domaine est en cours depuis plus de 70 ans. Cette publication émane de la recherche étendue qui a été menée au cours des 30 dernières années avec l'appui du ministère sud-africain de l'eau et de l'assainissement, ainsi que de la commission sud-africaine de recherche sur l'eau. Un grand nombre d'informations ont également été obtenues de la part de la Chine. Étant donné le caractère universel de formules hydrauliques, il n'est pas surprenant, mais très gratifiant, que les données chinoises et sud-africaines se conforment généralement aux mêmes relations mathématiques. Ceci indique que ces relations devraient être applicables dans d'autres pays également. Une grande partie de l'information contenue ici a été condensée à partir d'une publication plus complète. Ce bulletin CIGB fait suite au bulletin 115 "Traité sur la sédimentation dans les réservoirs", qui a donné des directives pour la gestion des réservoirs en vue de limiter la sédimentation. Les directives sur la modélisation mathématique de la dynamique de transport des sédiments dans les réservoirs de ce présent document peuvent être utilisées lors de la planification et la conception de nouveaux barrages et pour la gestion des barrages existants.

ICOLD Bulletin 180 presents the vast experience gained over the past 6 decades by the dam engineering community in the field of dam surveillance by means of 80 case histories. The documented case histories endeavour to cover the practical experiences related with one or several of the following points: a) Methods for the improvement of the quality and reliability of information. b) Data processing and representation techniques. c) Effective Diagnostic analyses to determine behaviour patterns. d) Dedicated surveillance systems for the optimization of maintenance, rehabilitation, and other life cycle costs. e) Impact of surveillance on preventing dam incidents and dam failure. f) Overview of dam surveillance management systems. The case histories cover a wide variety of technical aspects and deal with success stories but also incidents, some of them with catastrophic consequences. The time framework spans over 70 years: from the times of the Second World War up to the present. The purpose is to learn from

these practical experiences, not to criticize the involved individuals, who had to work with the techniques and rules of practice available at the time. This bulletin wants to contribute to keep learning from the experience of the dam engineering community, specifically in the field of dam surveillance. Some of the case histories are widely known and have been described and analysed in numerous publications. Most of them are related to famous dam failure incidents and were compiled as international "benchmark case histories" for this bulletin to focus on the specific lessons learnt related with dam surveillance. Le Bulletin de la CIGB 180 présente la vaste expérience acquise au cours des 6 dernières décennies par la communauté des ingénieurs de barrages dans le domaine de la surveillance des barrages au moyen de 80 histoires de cas. Les histoires de cas documentées s'efforcent de couvrir les expériences pratiques liées à un ou plusieurs des points suivants : a) Méthodes d'amélioration de la qualité et de la fiabilité de l'information. b) Techniques de traitement et de représentation des données. c) Analyses diagnostiques efficaces pour déterminer les modèles de comportement. d) Systèmes de surveillance dédiés pour l'optimisation de la maintenance, de la réhabilitation et des autres coûts du cycle de vie. e) Impact de la surveillance sur la prévention des incidents et des ruptures de barrage. f) Aperçu des systèmes de gestion de la surveillance des barrages. Les histoires de cas couvrent une grande variété d'aspects techniques et traitent de réussites mais aussi d'incidents, dont certains avec des conséquences catastrophiques. Le cadre temporel s'étend sur 70 ans : de l'époque de la Seconde Guerre mondiale à nos jours. Le but est d'apprendre de ces expériences pratiques, pas de critiquer les individus impliqués, qui ont dû travailler avec les techniques et les règles de pratique disponibles à l'époque. Ce bulletin veut contribuer à continuer d'apprendre de l'expérience de la communauté de l'ingénierie des barrages, en particulier dans le domaine de la surveillance des barrages. Certaines des histoires de cas sont largement connues et ont été décrites et analysées dans de nombreuses publications. La plupart d'entre eux sont liés à des incidents de rupture de barrages célèbres et ont été compilés en tant qu'« histoires de cas de référence » internationales pour ce bulletin afin de se concentrer sur les leçons spécifiques apprises liées à la surveillance des barrages.

Preliminary Reports

A Guide to Tailings Dams and Impoundments
Bulletin 178

Dam Heightenings

Dam Surveillance – Lessons Learnt From Case Histories / Surveillance des Barrages – Leçons

Tirées d'Études de cas

Written by civil engineers, dam safety officials, dam owners, geologists, hydraulic engineers, and risk analysts, this handbook is the first cooperative attempt to provide practical solutions to dam problems within the financial constraints faced by dam owners. It provides hands-on information for identifying and remedying common defects in concrete and masonry dams, embankment dams, reservoirs, and related structures. It also includes procedures for monitoring dams and collecting and analyzing data. Case histories demonstrate economical solutions to specific problems.

The Bulletin is intended as a general document aimed at a wide technical audience involved with or affected by hydropower. Basic background data and some statistics are presented, with specific reference to hydro-electricity production, hydropower dams, hydropower plants, in operation or under construction. Key aspects of hydropower are discussed. Data are presented about typical capital and both internal and external operating costs. Environmental and social impacts are discussed and reference is made to the impact reservoirs have on greenhouse gas emissions. A section is dedicated to the exploitation of tidal energy by means of barrage systems. The current extent of hydropower development and the influence of policies aimed to favour the development of renewable energies are also discussed. Reference sources of information, on hydropower in general and interesting case-histories, are provided. Le Bulletin se veut un document général destiné à un large public technique impliqué ou affecté par l'hydroélectricité. Des données de base et quelques statistiques sont présentées, avec une référence spécifique à la production hydroélectrique, aux barrages hydroélectriques, aux centrales hydroélectriques, en fonctionnement ou en construction. Les principaux aspects de l'hydroélectricité sont discutés. Les données sont présentées sur le capital type et les coûts de fonctionnement internes et externes. Les impacts environnementaux et sociaux sont discutés et il est fait référence à l'impact des réservoirs sur les émissions de gaz à effet de serre. Une section est dédiée à l'exploitation de l'énergie marémotrice au moyen de systèmes de barrage. L'ampleur actuelle du développement hydroélectrique et l'influence des politiques visant à favoriser le développement des énergies renouvelables sont également abordées. Des sources d'information de référence, sur l'hydroélectricité en général et des études de cas intéressantes, sont fournies.

An Introduction to Fish Migration

Proceedings of the ICOLD 2019 Symposium, (ICOLD 2019), June 9-14, 2019, Ottawa, Canada / Publications du symposium CIGB

2019, juin 9-14, 2019, Ottawa, Canada

Dams for Hydroelectric Energy Barrages pour l'Énergie Hydroélectrique

Steering the Knowledge-based Economy

*Integrated Operation of Hydropower Stations and Reservoirs/Exploitation des centrales hydroelectriques et des Reservoirs
Répertoire des bibliothèques d'étude et organismes de documentation: Paris, Seine et Seine-et-Oise*

Education in the public sector is undergoing a period of radical change, one that is shifting to embrace the role of private organizations in government services. In this groundbreaking book, Stephen J. Ball and Carolina Junemann critically engage the burgeoning literature on new governance, offering a “network ethnography” that presents the voices of the key actors working within this new model. By drawing the lines of this network, the authors highlight the increasing influence that financial capital and education businesses have on public policy and service delivery.

The International Committee on Large Dams (ICOLD) held its 27th International Congress in Marseille, France (12-19 November 2021). The proceedings of the congress focus on four main questions: 1. Reservoir sedimentation and sustainable development; 2. Safety and risk analysis; 3. Geology and dams, and 4. Small dams and levees. The book thoroughly discusses these questions and is indispensable for academics, engineers and professionals involved or interested in engineering, hydraulic engineering and related disciplines.

Networks, New Governance and Education

Bulletin 180

Twenty-Seventh International Congress on Large Dams Vingt-Septième Congrès International des Grands Barrages

Twenty-Sixth International Congress on Large Dams / Vingt-Sixième Congrès International des Grands Barrages
Education Research and Policy

Living Planet Report 2018

These proceedings include digital media with the full conference papers (3600+ pages).

Sustainable and Safe Dams Around the World contains the contributions presented at the 2019 Symposium of the International Commission on Large Dams (ICOLD 2019, Ottawa, Canada, 9-14 June 2019). The main topics of the book include: 1. Innovation (recent advancements and techniques for investigations, design, construction, operation and maintenance of water or tailings dams and spillways) 2. Sustainable Development (planning, design, construction, operation, decommissioning and closure management strategies for water resources or tailings dams, e.g. climate change, sedimentation, environmental protection, risk management). 3. Hazards (design mitigation and management of hazards to water or tailings dams, appurtenant structures, spillways and reservoirs (e.g. floods, seismic, landslides). 4.

Extreme Conditions (management for water or tailings dams (e.g. permafrost and ice loading, arid/wet climates, geo-hazards). 5. Tailings (design, construction, operation and closure for tailings dams; recent advancements and best practice) Sustainable and Safe Dams Around the World will be invaluable to academics and professionals interested or involved in dams. Un monde de barrages durables et sécuritaires contiennent les contributions présentées lors du symposium de 2019 de la Commission internationale des grands barrages (CIGB 2019, Ottawa, Canada, 9-14 juin 2019). Les principaux sujets du livre incluent: 1. Innovation (Avancées et techniques récentes pour l'investigation, la conception, la construction, l'exploitation et l'entretien de barrages hydrauliques, de barrages de stériles et d'évacuateurs de crues) 2. Développement durable (stratégies de gestion pour la planification, la conception, la construction, l'exploitation, la mise hors service et la fermeture de barrages hydrauliques ou des barrages de stériles, par exemple, changement climatique, sédimentation, protection de l'environnement, gestion des risques). 3. Risques (mesures d'atténuation et gestion des risques liés aux barrages hydrauliques et barrages de stériles, aux ouvrages annexes, aux évacuateurs de crues et aux réservoirs, par exemple, inondations, tremblements de terre, glissements de terrain). 4. Environnement extrême (gestion des barrages hydrauliques et barrages de stériles, par exemple, pergélisol et charge de glace, climats secs / humides, géorisques). 5. Barrages de stériles (conception, construction, exploitation et fermeture des barrages de stériles; avancées récentes et meilleures pratiques). Un monde de barrages durables et sécuritaires seront d'une valeur inestimable pour les universitaires et les professionnels intéressés ou impliqués dans les barrages.

Integrated operation of hydropower stations and reservoirs has become a trend of hydropower exploitation, as an effective technical measure, integrated operation can improve the utilization efficiency of water resources, reduce the risks of flood and drought disaster, increase the safety and stability power grid and make sure that hydropower stations and reservoirs operate in an appropriate and economical way. This bulletin gives an overview of the main functional and operational aspects relating to cascade hydropower stations and reservoirs, it was formed by reviewing of all the related aspects proposed and case studies provided by committee members. It collected and sorted out operation modes and practical

experiences of hydropower stations and reservoirs in ICOLD member countries, summarized the feasibility measures, benefit evaluation methods and system platform construction of hydropower stations and reservoirs with comprehensive benefits, and shared case studies from 10 countries, including Brazil, China, France, Iran, Japan, Korea, Nigeria, Russia, Switzerland and USA. L'exploitation intégrée des centrales hydroélectriques et des réservoirs est devenue une mesure technique efficace de l'exploitation hydroélectrique. L'exploitation intégrée peut améliorer l'efficacité d'utilisation des ressources en eau, réduire les risques de catastrophe, d'inondation et de sécheresse, augmenter la sécurité et la stabilité du réseau électrique et faire fonctionner les centrales hydroélectriques et les réservoirs de manière appropriée et économique. Ce bulletin donne un aperçu des principaux aspects fonctionnels et opérationnels relatifs aux centrales hydroélectriques et réservoirs en cascade. Il passe en revue tous les aspects connexes proposés et des études de cas fournies par les membres du comité. Il rassemble les modes de fonctionnement et les expériences pratiques des centrales hydroélectriques et des réservoirs dans les pays membres de la CIGB. Il résume les mesures de faisabilité, les méthodes d'évaluation des avantages et la construction de plates-formes de systèmes de centrales hydroélectriques et de réservoirs avec des avantages complets. Il bénéficie des expériences et des études de cas de 10 pays, y compris Brésil, Chine, Corée, France, Iran, Japon, Nigéria, Russie, Suisse et USA.

Dams and Water Transfers - An Overview / Barrages et Transferts d'Eau - Aperçu

Design, Construction, Use and Rehabilitation

The Global Carbon Cycle

Evaluation and Improvement

Toward a New Social Contract

A Review of Earthquake Resistant Design of Dams

Dams and Water Transfers – An Overview / Barrages et Transferts d'Eau - AperçuCRC Press

While a number of gases are implicated in global warming, carbon dioxide is the most important contributor, and in one sense the entire phenomena can be seen as a human-induced perturbation of the carbon cycle. The Global Carbon Cycle offers a scientific assessment of the state of current knowledge of the carbon cycle by the world's leading scientists sponsored by SCOPE and the Global Carbon Project, and other international partners. It gives an

introductory over-view of the carbon cycle, with multidisciplinary contributions covering biological, physical, and social science aspects. Included are 29 chapters covering topics including: an assessment of carbon-climate-human interactions; a portfolio of carbon management options; spatial and temporal distribution of sources and sinks of carbon dioxide; socio-economic driving forces of emissions scenarios. Throughout, contributors emphasize that all parts of the carbon cycle are interrelated, and only by developing a framework that considers the full set of feedbacks will we be able to achieve a thorough understanding and develop effective management strategies. The Global Carbon Cycle edited by Christopher B. Field and Michael R. Raupach is part of the Rapid Assessment Publication series produced by the Scientific Committee on Problems of the Environment (SCOPE), in an effort to quickly disseminate the collective knowledge of the world's leading experts on topics of pressing environmental concern.

Integrating Humans, Climate, and the Natural World

Cutoffs for Dams

Transactions of the Sixth International Congress on Large Dams, 15-20 September, 1958, New York

Dam Safety

Bulletin

4th - 6th July 2018, Vienna, Austria

The International Committee on Large Dams (ICOLD) held its 26th International Congress in Vienna, Austria (1-7 July 2018). The proceedings of the congress focus on four main questions: 1. Reservoir sedimentation and sustainable development; 2. Safety and risk analysis; 3. Geology and dams, and 4. Small dams and levees. The book thoroughly discusses these questions and is indispensable for academics, engineers and professionals involved or interested in engineering, hydraulic engineering and related disciplines.

Essais in Situ Des Structures en Beton

Transactions; Comptes Rendus

Aiming Higher

leaving no one behind

World Register of Dams